



The Impact of Authentic Leadership on Ethical Behavior

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Spring 2016



Submitted to Lawrence Technological University College of Management in partial fulfillment of the degree of Master of Global Leadership and Management



Submitted to Defense Acquisition University in partial fulfillment of the requirement of the Senior Service College Fellowship

Title: The Impact of Authentic Leadership on Ethical Behavior

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Date of Paper: Spring 2016

IRB Approval: December 18, 2015

OPSEC Approval: On May 26, 2016 by Security Officer Cindi Person, ASA(ALT) SoSE&I

Submission Date to DAU Library: June 7, 2016

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Abstract

The Department of Defense makes improved ethical behavior and decision making an annual priority within its military, civilian, and contracted workforce. Research indicates that leadership, particularly authentic leadership, can have a positive impact on improving the ethical behavior and decision making of employees. This study included a quantitative survey design with moderating variables to explore the level of authentic leadership practiced and its impact on ethical behavior in N = 342 employees from the Detroit Arsenal located in Warren, Michigan.

The elements that support the theoretical makeup of authentic leadership as supported in the literature were examined—transparency, moral/ethical, balanced processing, and self-awareness—as well as the impact of authentic leadership on ethical behavior across organizations. Additionally, the relationship between authentic leadership and ethical behavior was tested for its moderation by gender, pay grade, educational level.

The results indicated that there is not a significant correlation between authentic leadership and ethical behavior for this population. There were also no significant differences found in this relationship with regards to organization. Additionally, no moderation effect was found for any of the variables.

Three recommendations for Detroit Arsenal senior leaders are suggested from this study. First, make formal authentic leadership training available to subordinate leaders. Second, modify the approach to formal ethics training. Finally, emphasize ethical behavior routinely in both formal and informal communications with the workforce.

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Chapter 1 Introduction

The U.S. Army has been a principled organization since its inception. Ethics have functioned as a core competency from the time of the Continental Army in the late 1700's, through the War of 1812, and even during the American Civil War. These periods were not without their indiscretions, and the conflicts of the modern era have again brought ethical issues to the fore. This holds not only for the Army, but also for the entire Department of Defense (DoD). Public service involves public trust. President George H. W. Bush signed Executive Order 12674 on April 12, 1989. This set out 14 basic principles of ethical conduct that Department of Defense employees are expected to abide by. These include values such as employees placing laws and ethical principles above private gain, not using public office for private gain, and not giving preferential treatment to any private organization or individual. Government employees generally fulfill the public's trust when they follow these ethical standards. The Army ensures that commands and installations have ethics counselors to advise on ethical issues, conduct training, and execute mandatory Financial Disclosure Reports (OGE 278 or OGE 450).

However, despite this level of oversight and structure, there continues to be gross violations of ethical principles within the Army and its sister services. It is a remarkable violation of military values when an officer is forced to pay \$120,000 in fines for accepting bribes from contractors to whom he awarded lucrative Defense Department deals. The Department of the Navy would not expect one of its civilians to ask a defense contractor for payment so the contractor could be recommended for a contract. The American public does not knowingly pay taxes so that four senior officials, including two Air Force generals, a Marine general, and a Navy admiral, can extend their stay in Tokyo to play golf at a cost of \$3,000 to the

government. These are but a few examples of ethical violations compiled over the years from the Encyclopedia of Ethical Failure published annually by the U.S. Department of Defense Standards of Conduct Office as ethical indiscretions continue to occur.

It is accepted that ethical behavior will continue to be a fundamental expectation of employees by the military service departments. Given the continued struggles in achieving this objective, it is important to endure in seeking additional methods for augmentation. It is also essential to realize that not all breaches of ethical conduct are as transparent as those found in the DoD Encyclopedia. Frank Kendall, Under Secretary of Defense for Acquisition, Technology, and Logistics (AT&L) states that "...the form of ethical lapse I have seen too often consists of more subtle attempts to mislead decision makers in order to obtain a desired result." (Kendall, 2014, p. 3) He describes this issue as involving both the omission of information and "marketing."

Often the focus of proper conduct is squarely on the employee. This is logical given the responsibility of people for their own actions. However, research has shown that authentic leadership can also have a dramatic effect on the ethical decision making of employees and the guilt appraisal (practice by which an individual determines the extent of guilt he experiences for contemplating or performing a given unethical act) associated with unethical choices (Cianci et al., 2014).

Purpose of this Study

The Department of Defense makes improved ethical behavior and decision making an annual priority within its military, civilian, and contracted workforce. However, the mechanism by which the Department attempts to improve this behavior is often through attorney-developed mandatory training and policy memos. While these are commonly employed techniques, utilized

independently they suffer from their own efficacy issues. Research indicates that leadership, particularly authentic leadership, can have a positive impact on improving the ethical behavior and decision making of employees. The purpose of this study is to measure the level of authentic leadership practiced by the leadership team at the Detroit Arsenal and determine its impact on ethical behavior.

Research Questions

This research paper investigates five questions related to authentic leadership, and its effects on ethical behavior.

- Q1. What is ethical climate at the Detroit Arsenal?
- Q2. Is there an authentic leadership style prevalent within the leadership team at the Arsenal?
- Q3. What is the relationship between ethical behavior and authentic leadership?
- Q4. Are there differences in the practice of authentic leadership and ethical behavior among the organizations within the TACOM community?
- Q5. Does gender, pay grade, education level, or military experience affect the impact of authentic leadership on ethical behavior?

Research Hypothesis

The three hypotheses tested as part of this research are:

H₀₁: Authentic leadership behavior is not a significant predictor of ethical behavior.

H₀₂: There are no significant differences in the impacts of authentic leadership on ethical behavior across organizations.

H₀₃: Gender, Pay grade, education level, and military experience do not moderate the impact of authentic leadership on ethical behavior.

Conceptual Model

A conceptual model of the impacts of authentic leadership on ethical behavior was designed by conducting a thorough review of the literature associated with this topic. Peer-reviewed journal articles and other relevant references indicated that authentic leadership can have a positive effect on the ethical behavior of subordinates. However, the literature also shows that demographic data such as gender, pay, military experience, and education level can modify the effects of authentic leadership on ethical behavior. Therefore, these modifiers are captured in the following conceptual model.

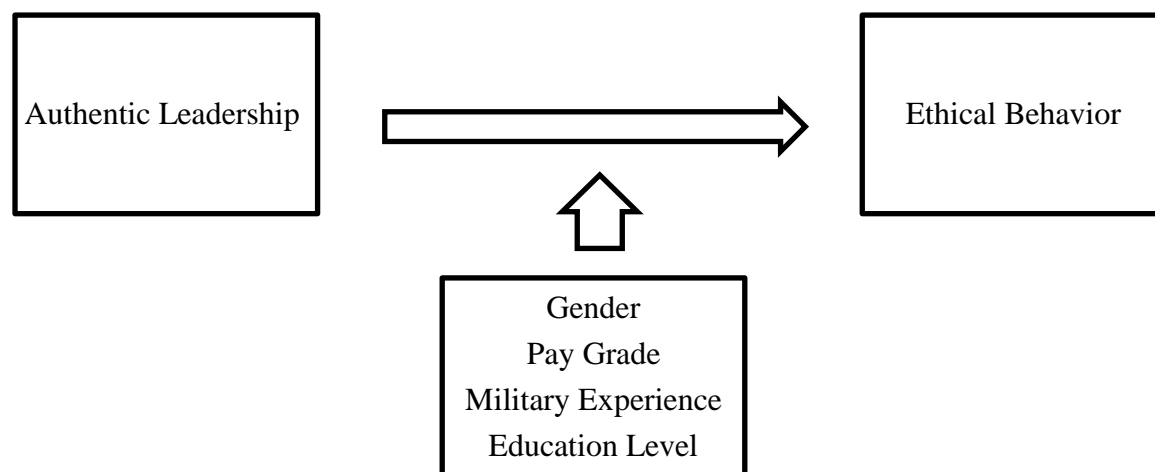


Figure 1.1. Conceptual Model of the Impacts of Authentic Leadership on Ethical Behavior

Authentic leadership is defined as “a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-

development” (Walumbwa et al., 2008, p. 94). This will be measured by administering the Authentic Leadership Questionnaire (ALQ) to the TACOM workforce (Walumbwa et al., 2008). The ALQ is a 16-item questionnaire that is broken down into four factors: Self-awareness, relational transparency, internalized moral perspective, and balanced processing.

Ethical behavior is defined as “individual behavior that is subject to or judged according to generally accepted moral norms of behavior” (Trevino et al., 2006, p.952). This variable will be measured by employee responses to four ethical vignettes delivered via survey.

Objectives and Outcomes

The primary objective of this study is to determine if authentic leadership promotes ethical decision making at the Detroit Arsenal. A desired outcome of the primary objective is to provide the TACOM-LCMC and PEO leadership an increased understanding of the ethical climate at the Detroit Arsenal, and how leadership behavior impacts employees. This information can be used to supplement current efforts to ensure ethical behavior within the community aligns appropriately with the 14 Principles of Ethical Conduct set forth by the United States Office of Government ethics.

Research Methodology

This study uses a quantitative research methodology. Quantitative data will be collected by the use of a web-survey, SurveyMonkey, administered to the TACOM-LCMC workforce and other tenant organizations at the Detroit Arsenal. The survey consists of three sections; the Informed Consent, Demographics, and Quantitative Data that measures the level of authentic leadership and ethical decision making. The analysis will determine if the presence of authentic leadership is correlated with ethical decision making. Additionally, it will determine what effects modifiers such as gender, pay grade, military experience, and education level have on the

impacts of authentic leadership on ethical decision making. In support of this examination, Cronbach's Alpha, Analysis of Variance (ANOVA), Linear and Hierarchical Regression will be used.

The organizations participating in this survey include the TACOM-LCMC Command Group and Staff, Army Contracting Command-Warren (ACC-W), Integrated Logistics Support Center (ILSC), Tank Automotive Research, Development, and Engineering Center (TARDEC), Program Executive Office (PEO) Ground Combat Systems (GCS), PEO Combat Support & Combat Service Support (CS&CSS), System of Systems Engineering and Integration Directorate (SoSE&I). The survey will also include an organizational category labeled "other" for employees who do not belong to one of these listed organizations.

Significance of this Research

The Department of Defense views itself as an honorable organization that expects ethical conduct by its members. This is demonstrated by the establishment of a Standards of Conduct Office and appointment of a DoD Designated Agency Ethics Official (DAEO). It also wrote DoD Directive 5500.7, Standards of Conduct to act as the guide for ethical programs within its departments. However, poor ethical conduct continues to plague segments of the organization despite rules, regulations, training, and oversight. Research within the civilian population indicates that leadership behavior, particularly authentic leadership, can increase the ethical decision making of employees. This research aims to contribute to this body of work by submitting a study of the impacts of authentic leadership on the ethical decision making of federal employees from the Department of Defense.

The outcomes of this research will be available to Army Acquisition leaders to provide additional leadership training that can potentially increase the level of ethical decision making by its employees.

Limitations of the Study

This research study was conducted with government employees of the TACOM-LCMC at the Detroit Arsenal and other Detroit Arsenal tenant organizations. The results may not be relevant outside of this community. The survey used to collect the data relies on employee self-assessment. There is always a possibility of social bias, however measuring ethical decision making of employees through vignettes helps reduce any biases in the responses.

The study of authentic leadership is still a relatively recent subject of inquiry. This study uses the authentic leadership questionnaire (ALQ) developed by Walumbwa et al. to measure the level of authentic leadership present at the Detroit Arsenal. This measure has shown validity in operationally defining authentic leadership, and has proven to be neutral across cultures. However, it alone may not include all relevant or important constructs in defining authentic leadership. This could have an effect on defining the importance of a particular leadership style on ethical behavior.

Chapter 2 Literature Review

Introduction

This chapter will survey academic journals and other studies that examine authentic leadership and its promotion of ethical behavior by employees within organizations. This review will also explore ethical theory, its application in the Department of Defense, and methods to measure ethical decision making. It will also investigate the theory behind authentic leadership and the validated theory-based measure known as the authentic leadership questionnaire (ALQ). Finally, it will assess areas such as gender, pay level, military experience, and education level that have shown to have a moderating effect on ethical behavior.

Purpose of this Study

The Department of Defense makes improved ethical behavior and decision making an annual priority within its military, civilian, and contracted workforce. However, the mechanism by which the Department attempts to improve this behavior is often through attorney-developed mandatory training and policy memos. While these are commonly employed techniques, utilized independently they suffer from their own efficacy issues. Research indicates that leadership, particularly authentic leadership, can have a positive impact on improving the ethical behavior and decision making of employees. The purpose of this study is to measure the current ethical climate of the Detroit Arsenal to determine the level of authentic leadership practiced, and its impact on ethical behavior.

Research Questions

This research paper investigates five questions related to authentic leadership, and its effects on ethical behavior. The first question seeks to understand the ethical climate at the Detroit Arsenal. The second question asks, is there an authentic leadership style prevalent within

the leadership team at the Arsenal. The third question seeks to understand the relationship between ethical behavior and authentic leadership. The fourth question explores whether there are differences in the practice of authentic leadership and ethical behavior among the organizations within the TACOM community. The fifth question seeks to understand if gender, pay grade, education level, or military experience affects the impacts of authentic leadership on ethical behavior.

Research Hypotheses

The three hypotheses tested as part of this research are:

H₀₁: Authentic leadership behavior is not a significant predictor of ethical behavior.

H₀₂: There are no significant differences in the impacts of authentic leadership on ethical behavior across organizations.

H₀₃: Gender, Pay grade, education level, and military experience do not moderate the impact of authentic leadership on ethical behavior.

Ethical Behavior

For the purposes of this study ethical behavior is nominally defined as “individual behavior that is subject to or judged according to generally accepted moral norms of behavior” (Trevino et al., 2006, p.952). However, the study of ethical (sometimes referred to as “moral”) behavior extends back to antiquity and has taken on many different connotations and begat intense scrutiny. Most students discover through secondary history courses that the Greek philosophers are often associated with subjects involving intellectual rigor. Ethical behavior does not deviate from this paradigm and finds its written study rooted in the works of Socrates, Aristotle, and Plato. Socrates endorsed the “critical examination of common moral beliefs in order to identify the puzzles and difficulties they raise” (Irwin, 2007, p.2). Plato and Aristotle

were quick to follow him in attempting to find the basic principles of morality, resolve complexities, and preserve common beliefs. The history of moral philosophy as the precursor to identifying ethical behavior today continued throughout time with notable historical figures such as Epicurus, Aquinas, Ockham, and Machiavelli providing their unique viewpoints (Irwin, 2007).

There have been many centuries between ancient times and today. However, when looking at ethical behavior through the lens of a workplace it can be argued that the 1980's began the modern period of intense focus on ethical behavior. Common business publications (i.e. Fortune, Newsweek, Time and Wall Street Journal) decried the ethical business climate during this decade as gluttonous, self-interested, and focused on personal wealth and fame (Stead et al., 1990). Respondents of a 1988 Touche Ross survey of business executives buttressed the attitude expressed by the writers of the business periodicals. Ninety-four percent of the 1,082 respondents (this included executives, directors, and business school deans) said that the entire business community was distressed by ethical problems (Touche Ross, 1988).

In order to understand ethical behavior, it is important to identify what makes up the behavior in organizations. Many researchers will point to human behavior as involving both individual and situational factors that influence the behavioral choices of citizens. From a personality and background perspective there are three measures that have been found to influence ethical behavior: ego strength, machiavellianism, and locus of control (Trevino, 1986).

Ego strength is defined as an individual's ability to engage in self-directed activity and to manage tense situations. Machiavellianism is a measure of deceitfulness and duplicity.

Locus of control is a measure of whether or not a person believes that his or her outcomes in life are determined by his/her own actions (internal) or by luck, fate or powerful other and institutions. (Stead et al., 1990)

Stead et al. (1990) produced a model utilizing a variety of studies that made the argument that ethical behavior involves more than just the previously quoted individual personality and socialization factors. It also includes an individual's ethical philosophies and decision ideologies, ethical decision history, organizational factors, and external factors.

Ethical philosophies include utilitarianism, individual rights, and justice. Utilitarianism involves a belief that ethics should consider the greatest good for the greatest number. An individual rights philosophy means ensuring an individual has the right to information, is free to consent, and is given due process. Finally, justice stresses social fairness and an opportunity for an individual to pursue happiness.

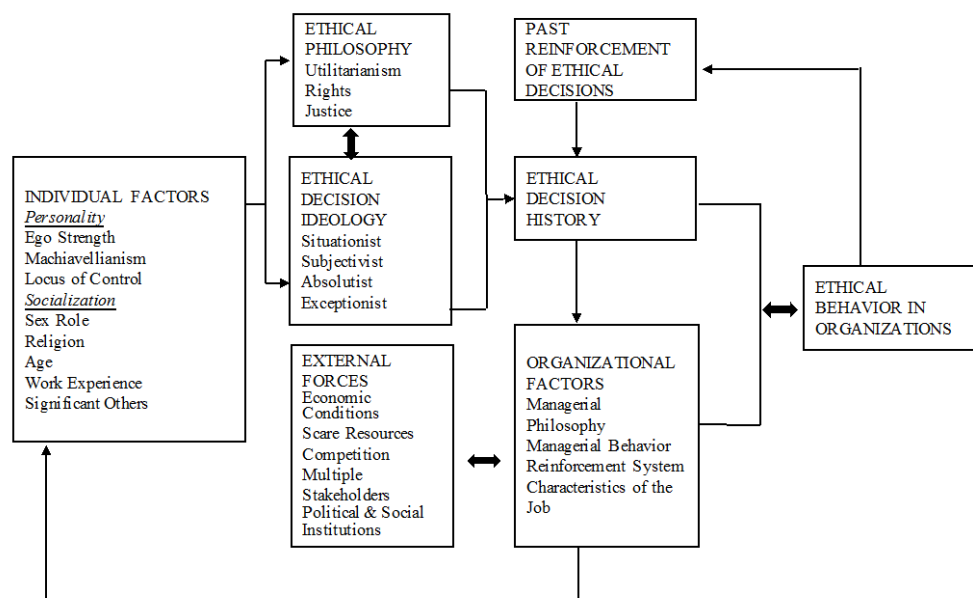


Figure 2.1. Model of ethical behavior (Stead et al., 1990, p.237)

Decision ideologies includes situationalists, subjectivists, absolutists, and exceptionists. They are all based upon the interplay of two dimensions known as idealism and relativism.

Idealism is the degree to which “an individual believes that ethical behavior always results in good outcomes” (Stead et al., 1990, p.235). Relativism is “the degree to which an individual believes that moral rules are situational” (Stead et al., 1990, p.235). Individuals who are situationalists are high in both idealism and relativism. Individuals who are subjectivists are low in idealism and high in relativism. Individuals who are absolutists are low in relativism and high in idealism. Individuals who are exceptionists are low in both idealism and relativism (Stead et al., 1990).

Ethical decision history is related to past decisions made by an individual. The authors identify from social learning theorists that these decisions become reinforced and can be persistent. Organizational factors are fairly straightforward in that they include such things as managerial philosophy, managerial behavior, the type of job, and how the organization provides reinforcement to employees. External forces likewise include economic conditions, resources, competition, stakeholders, and political and social institutions (Stead et al., 1990). In short, the authors seek to show that ethical behavior is not something that is easily attributed to a single individual characteristic, life history, or external influence. It is a combination of factors that lead to either ethical or unethical decision making.

Trevino et al. (2006) took a similar comprehensive approach to W. Edward Stead and his colleagues. She and her contemporaries sought to understand and expand upon the research from the previous two decades in “unethical behaviors, such as lying, cheating, and stealing,” ethical behavior defined as “those acts that reach some minimal moral standard and are therefore not unethical, such as honesty or obeying the law,” and ethical behavior defined as “behaviors that exceed moral minimums such as charitable giving and whistle-blowing.”. Trevino and her

colleagues categorize the aspects of ethical behavior into three main areas: individual, contextual-organizational, and contextual-issue related.

Two of the most highly researched areas of ethical behavior on the individual-level are the concepts of moral awareness and moral judgment. The notion of moral awareness specifies “identifying a moral issue involves an interpretive process wherein the individual recognizes that a moral problem exists in a situation, or that a moral standard or principle is relevant to the circumstances (Trevino et al., 2006, p.953).” In short, it is the cognitive ability of the individual to comprehend when a situation presents an ethical issue. This type of research typically requires subjects to identify an ethical encroachment or deviation from the norm. Moral judgment naturally follows awareness and involves a person making reasoned decisions in the context of an ethical situation.

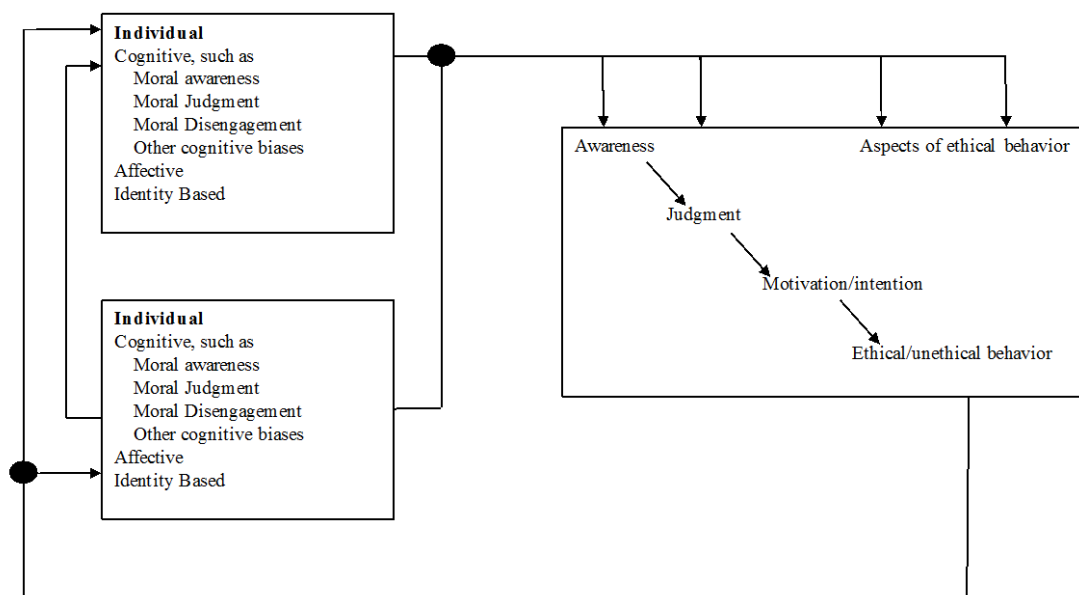


Figure 2.2. Categories of influences on behavioral ethics outcomes (Trevino et al., 2006, p.953)

Moral judgment's most noticeable concept comes from Kohlberg's (1969) cognitive moral development theory. Kohlberg reported that ethical reasoning becomes more refined over time. He postulated six stages of moral judgment in his theory that encompassed three broad categories. In the first stage (preconventional), individuals are concerned about obedience to authority and fear of punishment. As they move to the second stage (conventional) individuals rely more on the expectations of significant others or rules or laws. At the third stage (principled), individuals are able to determine the right course by observing universally held principles of justice and the rights of others. James R. Rest, a student of Kohlberg's, reported that fewer than 20% of American adults reach the principled level (Rest et al., 1999). Trevino et al. (2006) argue that the theory of moral judgment as outlined by Kohlberg has the potential for far reaching consequences. They state "if most adults' thinking about right and wrong is highly susceptible to external influence, then the management of such conduct through attention to norms, peer behavior, leadership, reward systems, climate, culture, and so on becomes important." (p. 955)

The model developed by Trevino and her colleagues also addresses contextual issues related to the organization. How an organization discusses ethical behavior is important, the type of culture it has, and how its leaders present themselves to an organization. Additionally, issues such as whether a situation is work-related or not and how drastic the consequences may be for a decision factor into the presence of ethical or unethical behavior.

Ethical behavior has become an important topic for leaders in nearly every arena of business and government today. Over fifty years of research has shown that there are a myriad of influences on behavior and its ethical outcomes. It would be incredibly difficult to ascertain whether or not appropriate behavior and quality decision making is less prevalent now than in

earlier periods of human history. What is less open for interpretation is the reality that ethical missteps are rapidly reported in a modern era in which information travels at the speed of light.

Ethical Behavior in DoD

President George H. W. Bush signed Executive Order 12674, “Principles of Ethical Conduct for Government Officers and Employees”, on April 12, 1989. This document lays out 14 principles of ethical conduct “to ensure that every citizen can have complete confidence in the integrity of the Federal Government”.

The encouragement of ethical behavior within the Department of Defense is led by the codification of a formal ethics program in accordance with Executive Order 12674. Department of Defense Directive 5500.07, dated November 29, 2007 states that DoD Agencies shall administer and maintain a comprehensive Agency ethics program and ensure compliance with appropriate United States Code. It also states that all DoD personnel will perform their official duties lawfully and comply with the highest ethical standards. Finally, it stipulates that ethics training be conducted as required within the various DoD commands or organizations.

On February 12, 2016, Secretary of Defense Ash Carter sent a memorandum throughout the Department of Defense entitled *Leader-led, Values-Based Ethics Engagement*. In this memorandum he implored leaders at all levels of the organization to engage in formal and informal discussions with subordinates about values-based decision-making. He also calls attention to ethical principles set forth in Chapter 12 of Joint Ethics Regulation 5500.07-R. The point of his message is clear: Leaders make a difference with regards to ethical conduct by employees in organizations.

The United States Army has formalized its ethics program through Army Doctrine Reference Publication (ADRP) 1 *The Army Profession*. The service updated this publication to

include Chapter 2, “The Army Ethic.” This chapter identifies the importance of the Army ethic, its origins, and the shared identity of its soldiers and civilians. It also provides detailed guidelines for both the expectations of Army professionals and the Army profession.

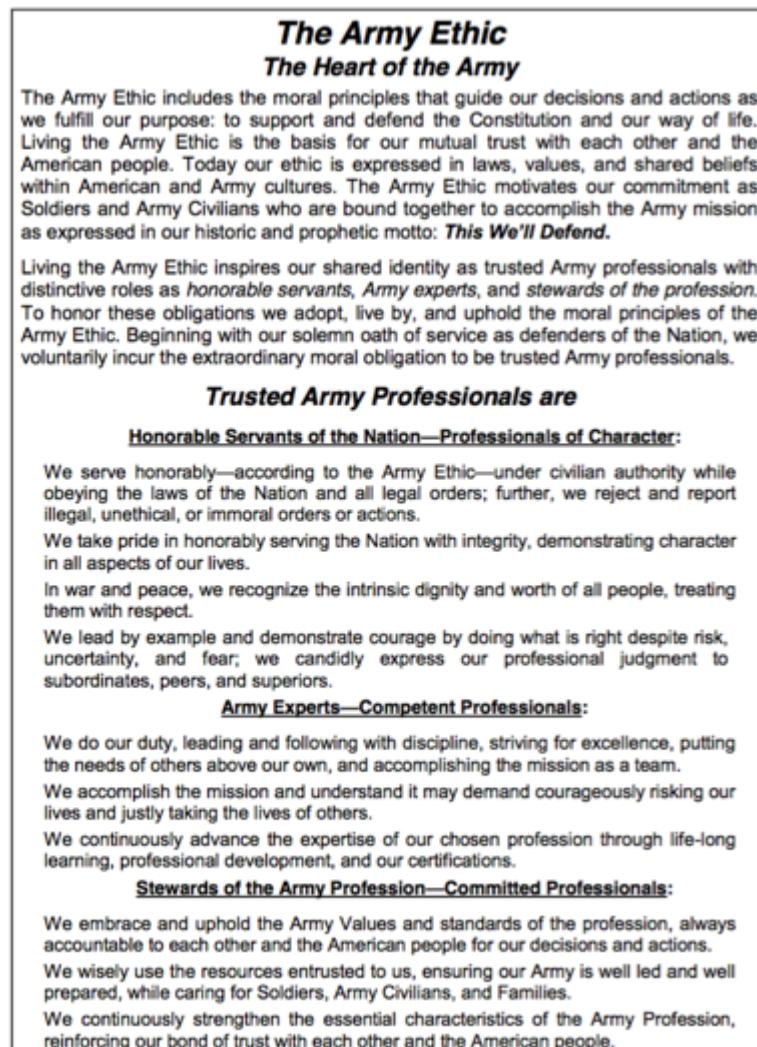


Figure 2.3. The Army Ethic, (ADRP 1, The Army Profession)

Measuring Ethical Behavior

Researchers have sought the appropriate way to measure ethical behavior and its roots (moral development) for many years. This objective is often pursued from multiple perspectives and generally with a goal to satisfy specific inquiries. A few of these instruments and techniques will be presented.

Lawrence Kohlberg and his colleagues attempted to understand the moral development of individuals from childhood to adulthood through a multi-situational interview process. The concept was to assess the highest stage of moral reasoning (Kohlberg developed a six stage model) shown by an individual by periodically assessing subjects throughout their lifespan. The instrument used by Kohlberg was called the Moral Judgment Interview (MJI). The MJI was refined through three editions and produced the Standard Issue Scoring method and an associated manual (Elm & Webber, 1994). According to Elm & Webber (1994) Kohlberg's stage theory can be used for ethics research in two ways. First, it can be utilized to evaluate the level of moral development of employees over time. Another application for the measurement is the identification of moral principles being employed in a given situation. The authors cite research that suggests that moral reasoning is related to moral behavior. However, it is not the only element in the process (Elm & Webber, 1994, p. 343).

James Rest developed the original Defining Issues Test (DIT) to assess the transition of moral development from adolescence to adulthood (Rest, 1979). The DIT uses a Likert-like scale to give quantitative ratings and rankings to matters involving five different moral dilemmas. Respondents rate 12 issues in terms of their importance to the related dilemma and then rank the four top significant issues. The DIT was updated in 1999 for brevity, clarity, and for increased validity (Rest, 1999).

The Ethics Position Questionnaire (EPQ) assesses the degree of idealism and rejection of universal moral rules in favor of relativism. It was developed to measure the extent to which individuals adopt one of the four ethical ideologies (situationism, absolutism, subjectivism, and exceptionism). It contains 20 attitude statements in which respondents are asked to indicate their degree of agreement or disagreement with each item. The goal of this measurement is to understand an individual's ideology in order to make determinations about moral judgments within certain situations (Forsyth, 1980).

Vignettes or scenarios are a frequently used method of collecting data with regards to ethical decision making. Care must be taken when designing these instruments to ensure they are easy to digest and are of appropriate length. Sims (1999) proposed that ideal dilemmas are "realistic in content and potential decisions easy to administer and score, and prove accurate and valid information beyond the obvious." He improved upon previous attempts to deliver scenarios in which only one ethical and one unethical choice were provided as answers. Sims also advocated for a guarantee of anonymity for successful results given the sensitive nature of organizational information.

Authentic Leadership

The concept of authentic leadership found its literary genesis in 2003. The book *Positive Organizational Scholarship* contained a chapter entitled Authentic Leadership Development written by Fred Luthans and Bruce Avolio (Cameron et al., 2003). This brought together Avolio's interest in fullrange leadership with Luthan's effort on positive organizational behavior. They espoused that authentic leaders "are transparent about their intentions and strive to maintain a seamless link between espoused values, behaviors, and actions." It was noted that the defining of authentic leadership from a scholarly perspective relied heavily on the field of

philosophy and psychology. However, its further development can almost certainly be attributed to the critiques of transformational leadership (Michie & Gooty, 2005). The authors define a key distinction of authenticity: self-transcending behaviors. These are those behaviors that are right and fair for all stakeholders and that may involve the willing sacrifice of self-interests for the collective good. They argue that “when leaders are committed to self-transcendent values and act on them without emotional conflict, their actions will be more consistent and authentic.”

Authentic leadership has been shown in some studies to have an effect on follower's ethical behavior and/or processing. Hannah, Avolio, & Walumbwa (2011) reasoned that modern organizations are morally-complex environments and thus require followers to possess moral courage in order to promote ethical action while abstaining from unethical actions. Their four-month study demonstrated that authentic leadership was positively related to followers' displays of moral courage, and through that tool, their ethical behavior.

A.M. Cianci et al. (2014) studied the effects of authentic leadership on followers' ethical decision-making specifically in the face of temptation. They expected that followers of more (as opposed to less) authentic leaders would make more ethical decisions. They proposed that high authentic leadership strengthens followers to withstand temptation, making them less likely to disengage from guilt and be more inclined to make an ethical decision. They found a significant and directionally reliable collaboration between temptation and authentic leadership in calculating the ethical decision.

Measuring Authentic Leadership (ALQ)

Authentic leadership is rooted in the simplistic notion of being true to oneself. However, as pointed out by Walumbwa et al (2008), there were many researchers studying leadership who felt there was much more to this theory than a simple definition. Walumbwa and his colleagues

proposed a higher order, multidimensional construct of authentic leadership after careful study and research. From this research they sought to validate a tool for measuring these behaviors. They were successful in creating a validated instrument for measuring authentic leadership known as the Authentic Leadership Questionnaire (ALQ). The ALQ consists of 16-items measuring four factors of authentic leadership: transparency, moral/ethical, balanced processing, and self awareness. Wulumbwa et al (2008) define these factors based on their work and that of others:

- Self-Awareness-Demonstrating an understanding of how one derives and makes meaning of the world and how that meaning making process impacts the way one views himself or herself over time.
- Relational Transparency-Refers to presenting one's authentic self (as opposed to a fake or distorted self) to others.
- Balanced Processing-Refers to leaders who show that they objectively analyze all relevant data before coming to a decision.
- Internalized Moral Perspective-Refers to an internalized and integrated form of self-regulation. This is guided by internal moral standards and values versus group, organizational, and societal pressures.

Moderators of Authentic Leadership on Ethical Behavior

There are variables that potentially affect the strength of the relationship between authentic leadership and ethical behavior. Gender, pay grade (related to position/experience in some industries), military experience, and education level will be considered for a weakening effect between the dependent and independent variables.

Gender has been shown via research to have an effect on ethical behavior. However, there are studies that have produced results exhibiting that gender plays no role in the differences observed between individuals. Weeks et al. (1999) conducted a study in which females were shown to have a stricter ethical stance than their male counterparts. Business professionals were measured on 19 variables and females took a stronger ethical stance in seven of them. This was shown to be statistically significant. In contrast, Radtke (2000) conducted a study on gender's effect on ethical behavior and found that the results refute the suggestion that women are more ethical and will therefore enhance the ethical decision making of an organization.

Pay grade within the Detroit Arsenal workforce is typically equated to both years of experience and career progression. Due to the strict nature of the pay system it is not possible to extend senior pay to a new employee without experience. Some literature suggests that those employees who are in later career stages possess higher ethical judgments. Weeks et al. (1999) conducted a study that showed those in later career stages displayed higher ethical decision making when confronted with a variety of challenging scenarios.

There exists a gap in the literature related to military experience and its effect on ethical behavior. However, given the mixed population of both Department of Defense civil service employees and military personnel, both segments will be examined. The military is replete with ethical training. Specific examples of both ethical and unethical behavior are emphasized by leaders to followers through various mediums on a regular basis. It seems likely that this exposure in a population could have an effect on the relationship between authentic leadership and ethical behavior.

Education level has also been shown to have an effect on ethical behavior. Deshpande (1997) conducted a study which contained a hypothesis that the level of education of the

respondents would affect their perception of various unethical business practices. He found that those with a graduate degree were much more likely to view ambiguous business situations as unethical. Browning and Zabriskie (1983) found that respondents with less education viewed taking gifts and favors to be less unethical than those with more education. Rest & Thoma (1985) found that spending time in college added meaningfully to the likelihood of moral judgment in young adulthood, greater than that shown by initial high school scores on the same moral-judgment measures. According to their study, the findings complemented and extended results from other cross-sectional and longitudinal studies on the relation of formal education to moral judgment.

Chapter 3 Research Methodology

Introduction

The chapter includes an overview of the purpose of the research, the research design, the research questions and research hypotheses, the research variables, the population and sample, pilot study, and the data analysis methodology.

The Department of Defense makes improved ethical behavior and decision making an annual priority within its military, civilian, and contracted workforce. However, the mechanism by which the Department attempts to improve this behavior is often through attorney-developed mandatory training and policy memos. While these are commonly employed techniques, utilized independently they suffer from their own efficacy issues. Research indicates that leadership, particularly authentic leadership, can have a positive impact on improving the ethical behavior and decision making of employees. The purpose of this study is to measure the current ethical climate of the Detroit Arsenal to determine the level of authentic leadership practiced, and its impact on ethical behavior.

Research Design

The research methodology for this study utilized a quantitative approach employing an on-line survey via Survey Monkey to collect data for analysis. An online survey was sent out to all of the 8,000 plus employees at the Detroit Arsenal via an email distribution list maintained by the senior mission command (TACOM). The survey instrument included three primary sections of forced-choice items. First, demographic data related to pay grade, organization, gender, and military experience. This was collected to measure the effect of moderation on the relationship between authentic leadership and ethical behavior. The survey utilized the validated 16-item Authentic Leadership Questionnaire (ALQ) (Wulumbwa et al., 2008) to measure the level of

authentic leadership present at the Detroit Arsenal. Respondents were asked to rate their leader on each question which consisted of a 5-point Likert type scale that ranged from 1-5 (“Not at all” - “Frequently, if not always”). Four ethics related vignettes were utilized to measure the level of ethical behavior displayed by employees at the Detroit Arsenal. Vignettes were employed from Sims & Keon (1999) who designed diverse ethical related business scenarios for use in measuring ethical decision making. There were five responses available to the participant for each vignette. Each response was assigned a pre-determined score of one through five. One was the lowest score available on each question with five being the highest.

Research Questions and Hypotheses

This research paper investigates five questions related to authentic leadership, and its effects on ethical behavior. The first question seeks to understand the ethical climate at the Detroit Arsenal. The second question asks, is there an authentic leadership style prevalent within the leadership team at the Arsenal. The third question seeks to understand the relationship between ethical behavior and authentic leadership. The fourth question explores whether there are differences in the practice of authentic leadership and ethical behavior among the organizations within the TACOM community. The fifth question seeks to understand if gender, pay grade, education level, or military experience affects the impacts of authentic leadership on ethical behavior.

The three hypotheses tested as part of this research are:

H₀₁: Authentic leadership behavior is not a significant predictor of ethical behavior.

H₀₂: There are no significant differences in the impacts of authentic leadership on ethical behavior across organizations.

H₀₃: Gender, Pay grade, education level, and military experience do not moderate the impact of authentic leadership on ethical behavior.

Research Variables

This research investigated two variables: authentic leadership and ethical behavior. Authentic leadership is the independent variable of the study, while ethical behavior is the dependent variable. Demographic variables were also obtained in the study to determine their role as moderators of the relationship between authentic leadership and ethical behavior.

Authentic leadership is defined in this study as “a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development” (Walumbwa et al., 2008, p. 94).

Ethical behavior is defined as “individual behavior that is subject to or judged according to generally accepted moral norms of behavior” (Trevino et al., 2006, p.952)

Population and Sample

The population for this study included all employees at the Detroit Arsenal, Warren Michigan. The population of employees exceeds 8,000 personnel. An email was sent by the Chief of Staff, TACOM to the installation population informing them of the survey and its intent. Additionally, some sister organizations at the Detroit Arsenal sent a secondary email to their employees with the link to the survey and its description. There were 419 employees who attempted the survey. Of these employees, 75 of the consenting participants completed less than 75% of the survey, and two participants indicated they did not want to participate after reading

the informed consent. These 77 participants were excluded from the final sample, yielding a final sample size for analysis of $N = 342$ employees.

Protection of participants' rights. Federal requirements specified by the Department of Health and Human Services' Code of Federal Regulations, 45 CFR 46, were followed. Approval to conduct research with human participants was obtained from both Lawrence Technological University Institutional Review Board (IRB) and the senior leaders of each organization located at the Detroit Arsenal. All participants were required to provide their voluntarily informed consent before completing the survey instrument. One requirement of the IRB was to include only participants that were over 18 years of age. All employees at the Detroit Arsenal met this requirement. Participants were asked to select whether they agreed or disagreed to participate. Those who agreed were permitted to continue the survey. Those who did not agree were thanked for their participation and the survey was discontinued. Two participants indicated on the survey that they did not wish to participate after reading the informed consent.

Pilot Study

This research contained a pilot evaluation for the purposes of assessing the psychometric properties of the survey instrument. In the pilot study, the face validity of the survey instrument was weighed prior to administering the survey to the study participants. Specifically, the researcher's fellowship classmates and Defense Acquisition University faculty reviewed the survey for clarity, survey logic, and to identify any general improvements to the instrument. There were no significant changes made to the survey instrument. A logical error with the instrument was remedied. Additionally, the organizational choices within the demographic data was altered to more accurately capture the major organizations at the Detroit Arsenal.

Data Analysis Methodology

Survey data were imported into Microsoft Excel from SurveyMonkey for cleaning and coding as needed. Next, data were transferred from Excel into Minitab version 17.2.1 for quantitative statistical analysis. Minitab was used for descriptive statistics and inferential statistics. Each statistical procedure used all available data. Unless otherwise noted, inferential statistics were evaluated at the 95% confidence level (i.e., alpha was set at the .05 level, two-tail tests of statistical significance).

Descriptive statistics. Descriptive statistics of categorical demographic characteristics were comprised of frequency analysis (with chi-square test of significant distributions). Descriptive statistics of continuous variables were comprised of means and standard deviations (with one-way ANOVA test of significant means across demographic characteristics), and Pearson product moment correlations between continuous variables. A test for intercorrelation was run between authentic leadership (and its four factors) and ethical behavior as the first step in identifying the relationship between the study variables.

Psychometric properties. The psychometric properties of the Likert-type items used for measuring authentic leadership and ethical behavior were evaluated using Cronbach's coefficient alpha test of internal consistency reliability (Cronbach, 1951). Cronbach's coefficient alpha was computed using Minitab.

Cronbach's alpha determines the internal consistency (or average correlation) of a set of items in a survey instrument as an index of a survey's reliability. Alpha numbers can range from 0.0 to 1.0; alpha values of 0.7 or higher indicate acceptable reliability (Hinkin, 1998), and alpha values below 0.5 indicate little to no reliability of the survey items (Santos, 1999). If the survey items show poor reliability, then individual items on the survey may need to be re-examined.

Inferential statistics. Minitab was used to test H_{01} in which the dependent variable, ethical behavior, was regressed on the independent variable, authentic leadership, using linear regression. Ethical behavior was also regressed on the four factors that comprise authentic leadership: TR = Transparency, ME = Moral/Ethical, BP = Balanced Processing, SA = Self-Awareness. H_{02} was tested by performing a hierarchical linear regression of ethics regressed on authentic leadership by each organization. H_{03} was tested by regressing ethical behavior on authentic leadership and four moderators (gender, pay grade, education, and military experience).

Finally, two one-sample t-Tests were conducted for further exploration of the relationship between the study variables. The first was conducted on the authentic leadership score (compared against a score of 4.0) for all participants and participants in each organization in an attempt to determine if there were differences in authentic leadership across organizations. The second was a one-sample t-Test of the ethics score (compared against a score of 4.0) for all participants and participants in each organization. A score of 4.0 was determined to be an appropriate benchmark to measure both variables against as both were surveyed on a scale of 1.0 (lowest) to 5.0 (highest).

Chapter 4 Results

Introduction

This study investigated the relationship between authentic leadership and ethical behavior for the employees of the Detroit Arsenal in Warren, Michigan. The study examined data obtained via an online survey administered using SurveyMonkey. The survey was made available to all employees at the Detroit Arsenal. The number of potential participants totaled 8,000+ employees. Data were collected from survey respondents who varied in gender, pay grade, job specialty, organization, and management responsibilities. Accordingly, employee data were investigated for the psychometric properties of the online survey in terms of the reliability and validity of the survey's instruments that measured authentic leadership and ethical behavior. Authentic leadership (as measured by transparency, moral-ethical, balanced processing, and self-awareness via the ALQ) was tested as a predictor of ethical behavior. The study also investigated the moderating effects of gender, pay grade, education level, organization, and military experience on the relationship between authentic leadership and ethical behavior.

The online survey instrument was administered to $N = 8000+$ employees, 419 of whom provided their voluntary consent to participate in the study. Seventy-five of the consenting participants completed less than 75% of the survey, and two participants indicated they did not want to participate after reading the informed consent. These 77 participants were excluded from the final sample, yielding a final sample size for analysis of $N = 342$ employees. All available data were analyzed in Minitab 17.2.1, using general linear modeling inferential statistics to evaluate psychometric properties and test the three study hypotheses:

H_{01} : Authentic leadership behavior is not a significant predictor of ethical behavior.

H₀₂: There are no significant differences in the impacts of authentic leadership on ethical behavior across organizations.

H₀₃: Gender, Pay grade, education level, and military experience do not moderate the impact of authentic leadership on ethical behavior.

Demographic Characteristics of the Sample

Table 4.1 presents the demographic characteristics of the sample in terms of gender, pay grade, education, organization, and military experience. As shown in Table 4.1, the sample (N = 342) included more males than females (69.6% males to 30.4% females). The pay grade was distributed in logical groups of General Schedule (US Civil Service) grades. It also included contractors and those identified as active duty military. The results showed 0.6% were GS 1-4, 4.7% were GS5-8, 10.5% were GS 9-11, 55.3% were GS12-13, 24.9% were GS14-15, 0.3% were SES, 2.3% were contractors, and 1.5% active duty military. Education level data indicated 6.7% of respondents possessed a high school diploma, 5.6% an associates degree, 28.1% a bachelor's degree, 14.3% some Master's work, 42.7% completing a Master's degree, and 2.6% holding a Doctoral degree. The organizational affiliation of respondents showed that 10.8% belonged to Army Contracting Command-Warren (ACC), 21.6% to Integrated Logistics Support Center (ILSC), 11.4% to Program Executive Office, Combat Support and Combat Service Support, 22.2% to Program Executive Office, Ground Combat Systems (GCS), 2.3% to System of Systems, Engineering & Integration (SoSE&I), 7.3% to TACOM-Command Staff, 15.8% to Tank Automotive Research, Development, and Engineering Center (TARDEC), and 8.5% other organizations not listed. 42.7% of respondents indicated previous military experience while 57.3% indicated they had never served. Also shown in Table 4.1 is the results of Chi-square tests of the equality of the distributions for each demographic characteristic. Results found each

characteristic was significantly distributed, indicating unequal proportions of respondents in each category. For example, the sample was not equally distributed across gender (69.6% male vs. 30.4% female). This finding is important in terms of interpreting the results of subsequent analyses insofar as the over- or under-representation of a particular demographic characteristic must be taken into account.

Table 4.1 Characteristics of Sample by Gender, Pay Grade, Education, Organization, and Military Experience

Characteristic	n	%
Total Sample	342	100.0
Gender		
Male	238**	69.6
Female	104	30.4
Pay Grade		
GS 1-4	2**	0.6
GS 5-8	16	4.7
GS 9-11	36	10.5
GS 12-13	189	55.3
GS 14-15	85	24.9
SES	1	0.3
Contractor	8	2.3
Active Military	5	1.5
Education		
H.S.	23**	6.7
A.D	19	5.6
B.D	96	28.1
Some Grad	49	14.3
Masters	146	42.7
Doctorate	9	2.6
Organization		
ACC Warren	37**	10.8
ILSC	74	21.6
PEO CS&CSS	39	11.4
PEO GCS	76	22.2
SosE&I	8	2.3
TACOM	25	7.3
TARDEC	54	15.8
Other	29	8.5
Military Experience		
Yes	146**	42.7
No	196	57.3

Note. Sample frequency is expressed as % of all participants, N = 342.

** $p < .01$ Chi-square test for equality of distribution.

Reliability and Validity

This study utilized existing instruments from prior research to measure authentic leadership and ethical behavior. Accordingly, reliability and validity of the survey were evaluated for the purposes of confirming the reliability of existing measures in the study sample. The psychometric properties of the study survey were evaluated statistically using Cronbach's coefficient alpha test of internal consistency (as an index of reliability). As such, the 16 items that measured authentic leadership via the authentic leadership questionnaire (ALQ) were tested for internal consistency reliability using Cronbach's coefficient alpha. The criterion value for alpha is 0.7, with values > 0.7 indicative of reliability (Hinkin, 1998). Alpha measures the intercorrelation between items on a survey. Thus, if the alpha score is high, e.g., 0.7 or higher, the interpretation is that the participant is responding consistently on items for which the items should be highly correlated with each other. Table 4.2 presents the results of the reliability testing. As shown, the alpha values for the ALQ full scale score and the four ALQ factor scores were indicative of acceptable reliability with alpha for the full 16-item survey = 0.969, alpha for the 5-item measure of Transparency = 0.876, alpha for the 4-item measure of Moral/Ethical = 0.904, alpha for the 3-item measure of Balanced Processing = 0.889, and the alpha for the 4-item measure of Self Awareness = 0.945.

In contrast to reliability of the survey being evaluated statistically, validity of the ethical behavior portion of the survey was evaluated from the literature and via face validity. In terms of the literature, the ALQ was previously found to be a valid measure of authentic leadership as noted in Walumbwa et al. (2008). For face validity, both the 16 items that measured authentic leadership and the 4 items that measure ethics were reviewed for correct spelling and presenting within SurveyMonkey by the researcher and agreement by peers.

Table 4.2 *Reliability of the 16-item ALQ*

Survey Items	Mean ¹	SD ²	Alpha ³
ALQ Full Scale (16-items)	3.66	1.03	0.969
Transparency (5-items)	3.64	1.03	0.876
Moral/Ethical (4-items)	3.84	1.07	0.904
Balanced Processing (3-items)	3.68	1.09	0.889
Self-Awareness (4-items)	3.49	1.19	0.945

Note. ¹Mean of items within scale where each ALQ item measured on a 5-point Likert scale, 1 = not at all, 5 = frequently if not always. ²Standard deviation. ³Cronbach's alpha reliability measure of internal consistency.

Descriptive Statistics

Table 4.3 presents the results of descriptive statistics in which the mean and standard deviation (SD) of authentic leadership and ethics were examined across the five demographic characteristics presented in Table 4.1: gender, pay grade, education, organization, and military experience. Table 4.3 describes the mean and SD of authentic leadership and its four factors and the mean and SD of ethics across the demographic characteristics. Differences in the mean scores across the demographic characteristics were tested using one-way ANOVA.

Table 4.3 presents the results of descriptive statistics of authentic leadership (ALQ) and its four constitutive factors, transparency (TR), moral/ethical (ME), balanced processing (BP), and self-awareness (SA), and the descriptive statistics of ethics across each of the five demographic characteristic. As shown, there were differences in mean scores on transparency between males and females. There were differences in mean scores between pay grades relative to authentic leadership. There were differences in mean scores across organizations related to authentic leadership as well as the factors of moral/ethical, balanced processing, and self-awareness. All other demographic characteristics showed no significant difference in mean scores across the sample.

Table 4.3 *Mean and SD of Authentic Leadership and its Four Factors and Ethics across Gender, Pay Grade, Education, Organization, and Military Experience.*

Demographic	ALQ		TR		ME		BP		SA		Ethics	
Characteristic	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Total	3.66	1.03	3.64	1.03	3.84	1.07	3.68	1.09	3.49	1.19	3.66	1.03
Gender												
Male	3.71	1.01	3.72*	1.00	3.91	1.04	3.71	1.09	3.51	1.20	3.74	0.64
Female	3.54	1.05	3.45	1.08	3.67	1.13	3.62	1.09	3.46	1.18	3.78	0.52
Pay Grade												
GS 1-4	4.94*	0.00	5.00	0.00	4.88	0.18	5.00	0.00	4.88	0.18	3.88	0.88
GS 5-8	3.88	1.05	3.93	1.03	4.11	1.08	3.73	1.24	3.69	1.12	3.70	0.52
GS 9-11	3.36	1.15	3.33	1.13	3.54	1.25	3.34	1.19	3.21	1.27	3.51	0.78
GS 12-13	3.57	1.05	3.56	1.05	3.76	1.07	3.61	1.09	3.37	1.22	3.76	0.58
GS 14-15	3.82	0.91	3.77	0.93	3.97	1.01	3.86	1.00	3.70	1.09	3.85	0.57
SES	4.63	--	4.80	--	5.00	--	4.00	--	4.50	--	4.00	--
Contracts	4.07	0.90	4.13	0.91	4.06	0.92	4.00	0.98	4.06	1.08	3.44	0.55
Active Military	4.20	0.57	3.96	0.71	4.55	0.76	4.33	0.53	4.05	0.62	3.65	0.78
Education												
H.S.	3.65	0.88	3.64	0.83	3.96	0.90	3.58	0.93	3.41	1.10	3.96	0.52
A.D	3.71	1.15	3.66	1.14	3.83	1.22	3.72	1.17	3.63	1.24	3.88	0.56
B.D	3.73	1.05	3.68	1.09	3.91	1.04	3.76	1.11	3.57	1.20	3.72	0.61
Some Grad	3.54	1.08	3.57	1.08	3.71	1.17	3.50	1.14	3.37	1.20	3.59	0.71
Masters	3.65	1.02	3.62	1.00	3.82	1.06	3.71	1.08	3.48	1.22	3.76	0.58
PhD	3.54	0.98	3.64	0.98	3.69	1.28	3.41	0.98	3.36	1.00	3.86	0.55
Organization												
ACC Warren	4.08*	0.79	3.97	0.83	4.30*	0.88	4.14*	0.84	3.95*	0.95	3.72	0.64
ILSC	3.37	1.14	3.40	1.15	3.55	1.17	3.31	1.21	3.18	1.27	3.89	0.63
PEO CS&CSS	3.69	0.91	3.58	0.89	3.95	0.94	3.80	0.95	3.49	1.08	3.83	0.43
PEO GCS	3.88	0.99	3.82	1.02	4.04	1.01	3.93	1.00	3.77	1.18	3.65	0.62
SosE&I	3.80	0.73	3.63	0.82	3.88	0.86	3.92	0.71	3.84	0.73	3.84	0.57
TACOM	3.47	1.21	3.55	1.20	3.55	1.31	3.48	1.24	3.29	1.34	3.76	0.62
TARDEC	3.61	0.92	3.62	0.91	3.75	0.98	3.68	0.98	3.40	1.17	3.69	0.56
Other	3.46	1.13	3.52	1.15	3.70	1.16	3.32	1.24	3.23	1.23	3.65	0.72
Military Experience												
Yes	3.61	1.01	3.61	0.97	3.82	1.00	3.61	1.13	3.40	1.23	3.76	0.65
No	3.69	1.04	3.65	1.07	3.85	1.13	3.73	1.06	3.56	1.17	3.74	0.57

Note. * $p < .05$ significant difference between mean variable scores within demographic characteristic according to one-way ANOVA (N = 342).

Intercorrelations Between Study Variables

Table 4.4 presents the results of the intercorrelation between ALQ (and its four factors) and Ethics. As expected, the correlation between the ALQ full score and each of its four factors was very strong ($r > 0.9$ for each correlation). In contrast, there was no correlation between ALQ and ethics. This finding is further tested using regression analysis in the next section.

Table 4.4 *Intercorrelation Between Study Variables*

	ALQ	TR	ME	BP	SA	Ethics
ALQ	1.00					
TR	0.94**	1.00				
ME	0.94**	0.88**	1.00			
BP	0.94**	0.81**	0.85**	1.00		
SA	0.94**	0.82**	0.83**	0.90**	1.00	
Ethics	0.02	0.03	0.03	-0.01	0.02	1.00

Note. Numbers in the table are correlation coefficients. ALQ = Authentic Leadership Questionnaire, TR = Transparency, ME = Moral/Ethical, BP = Balanced Processing, SA = Self-Awareness. ** $p < 0.01$ Pearson's Product Moment Correlation

Hypotheses Testing Results for H₀₁

Hypothesis₀₁ stated that authentic leadership is not a significant predictor of ethical behavior. Table 4.5 shows the that none of the factors was significant at the 95% confidence level. **This shows that authentic leadership is not a significant predictor of ethical behavior.**

Table 4.5 *Linear Regression of Ethics Regressed on Authentic Leadership and Its Four Factors*

Predictor	Beta	SE	T	p value	R-square
Constant	3.707	0.121	30.560	0.000	
ALQ	0.011	0.032	0.360	0.721	1.0%
Constant	3.722	0.129	28.750	0.000	
TR	0.026	0.070	0.370	0.715	1.0%
ME	0.033	0.073	0.450	0.654	
BP	-0.093	0.077	-1.210	0.227	
SE	0.042	0.069	0.620	0.538	

ALQ = Authentic Leadership Questionnaire, TR = Transparency, ME = Moral/Ethical, BP = Balanced Processing, SA = Self-Awareness.

Hypotheses Testing Results for H₀₂

Hypothesis₀₂ stated that there are no significant differences in the impact of authentic leadership on ethical behavior across organizations. Table 4.6 shows the majority of organizations were not significant at the 95% level. **This means that there are not significant differences in the impact of authentic leadership on ethical behavior across organizations.** However, it should be noted that PEO CS & CSS showed a significant relationship between authentic leadership and ethical behavior (p value=0.012). There were three organizations who showed a negative relationship between authentic leadership and ethical behavior. It should be noted that none of these relationships were statistically significant.

Table 4.6 *Linear Regression of Ethics Regressed on Authentic Leadership in Each Organization*

Organization	Predictor	Beta	SE	T	p value
ACC Warren	Constant	3.481	0.562	6.190	0.000
	ALQ	0.059	0.135	0.440	0.664
ISLC	Constant	3.918	0.230	17.010	0.000
	ALQ	-0.010	0.065	-0.150	0.881
PEO CS&CSS	Constant	3.130	0.273	11.460	0.000*
	ALQ	0.189	0.072	2.630	0.012
PEO GCS	Constant	3.551	0.292	12.170	0.000
	ALQ	0.027	0.073	0.370	0.716
SoSE&I	Constant	4.970	1.130	4.420	0.004
	ALQ	-0.298	0.292	-1.020	0.347
TACOM	Constant	3.629	0.394	9.220	0.000
	ALQ	0.038	0.107	0.350	0.728
TARDEC	Constant	3.852	0.315	12.240	0.000
	ALQ	-0.045	0.085	-0.530	0.598
Other	Constant	3.489	0.443	7.880	0.000
	ALQ	0.046	0.122	0.370	0.711

ACC Warren = Army Contracting Command-Warren, ISLC = Integrated Logistics Support Center, PEO CS&CSS = PEO Combat Support & Combat Service Support, PEO GCS = Program Executive Office Ground Combat Systems, SoSE&I = System of Systems Engineering and Integration Directorate, TARDEC = Tank Automotive Research, Development, and Engineering Center, TACOM = TACOM-LCMC Command Group and Staff, Other = Smaller Organizations Not Listed

Hypotheses Testing Results for H₀₃

Hypothesis₀₃ stated that gender, pay grade, education, and military experience do not moderate the impact of authentic leadership on ethical behavior. **Table 4.7 shows that gender, pay grade, education, and military service do not significantly moderate the effects of authentic leadership on ethical behavior.** There are no significant impacts of authentic leadership on ethical behavior.

Table 4.7 *Linear Regression of Ethics Regressed on Authentic Leadership and Four Moderators (gender, pay grade, education level, military experience)*

Predictor	Beta	SE	T	p value
Constant	3.245	0.365	8.900	0.000
ALQ	0.124	0.096	1.290	0.199
Gender	0.344	0.257	1.340	0.181
ALQ*Gender	-0.084	0.069	-1.220	0.222
Constant	3.007	0.663	4.540	0.000
ALQ	0.105	0.167	0.630	0.528
Pay Grade	0.172	0.166	1.040	0.300
ALQ*Pay Grade	-0.022	0.042	-0.540	0.593
Constant	3.976	0.409	9.720	0.000
ALQ	-0.038	0.108	-0.360	0.723
Ed	-0.068	0.100	-0.680	0.494
ALQ*Ed	0.013	0.026	0.480	0.634
Constant	3.261	0.406	8.040	0.000
ALQ	0.146	0.108	1.350	0.177
Mil Exp	0.281	0.246	1.140	0.254
ALQ*Mil Exp	-0.085	0.065	-1.300	0.194

Ed = Education Level, Mil Exp = Military Experience

Exploratory Analyses

This research also focused on providing a representation of the overall level of authentic leadership and the ethical climate present at the Detroit Arsenal.

A one-sample t-Test was conducted comparing the authentic leadership score of the overall sample and each individual organization against a constant score of 4.0. A score of 4.0

was determined to be an appropriate benchmark to measure as authentic leadership was surveyed on a scale of 1.0 (lowest) to 5.0 (highest).

In this case, a p-value of $p > 0.05$ shows significance that an organization met the benchmark score of 4.0. Table 4.8 displays the results whereby ACC Warren, PEO GCS, and SoSE&I p-values indicating they met the benchmark score of 4.0 with 95% confidence. It should be noted that SoSE&I only had 8 participants in the survey. All participants at the Arsenal showed a mean of 3.66 (CI=3.549, 3.767). ACC Warren had the highest mean at 4.08 (CI=3.812, 4.340). The ILSC had the lowest mean of 3.37 (CI=3.103, 3.632).

Table 4.8 *One-Sample t-Test of ALQ Score Compared Against a Score of 4.0 for All Participants and Participants in Each Organization*

Sample	Variable	N	Mean	StDev	SE Mean	95% CI	T	P
All participants	ALQ	342	3.66	1.03	0.06	(3.549, 3.767)	-6.160	0.000
ACC Warren	ALQ	37	4.08	0.79	0.13	(3.812, 4.340)	0.580	0.563*
ILSC	ALQ	74	3.37	1.14	0.13	(3.103, 3.632)	-4.770	0.000
PEO CS&CSS	ALQ	39	3.69	0.91	0.15	(3.396, 3.986)	-2.120	0.040
PEO GCS	ALQ	76	3.88	0.99	0.11	(3.655, 4.105)	-1.060	0.292*
SoSE&I	ALQ	8	3.80	0.73	0.26	(3.186, 4.408)	-0.790	0.458*
TACOM	ALQ	25	3.47	1.21	0.24	(2.974, 3.971)	-2.180	0.039
TARDEC	ALQ	54	3.61	0.92	0.13	(3.357, 3.858)	-3.140	0.003
Other	ALQ	29	3.46	1.13	0.21	(3.029, 3.885)	-2.600	0.015

ALQ=Authentic Leadership Questionnaire; ACC Warren = Army Contracting Command-Warren, ILSC = Integrated Logistics Support Center, PEO CS&CSS = PEO Combat Support & Combat Service Support, PEO GCS = Program Executive Office Ground Combat Systems, SoSE&I = System of Systems Engineering and Integration Directorate, TARDEC = Tank Automotive Research, Development, and Engineering Center, TACOM = TACOM-LCMC Command Group and Staff, Other = Smaller Organizations Not Listed

A one-sample t-Test was conducted comparing the ethical behavior score of the overall sample and each individual organization against a constant score of 4.0. A score of 4.0 was determined to be an appropriate benchmark to measure as ethical behavior was surveyed on a scale of 1.0 (lowest) to 5.0 (highest).

In this case, a p-value of $p > 0.05$ shows significance that an organization met the benchmark identified score of 4.0. Table 4.9 displays the results whereby the ILSC, SoSE&I,

and TACOM had p-values indicating they met the benchmark score of 4.0 with 95% confidence.

All participants at the Arsenal showed a mean of 3.75 (CI=3.684, 3.813). The ILSC had the highest mean at 3.89 (CI=3.740, 4.030). The PEO GCS had the lowest mean of 3.65 (CI=3.513, 3.796).

Table 4.9 One-Sample t-Test of Ethical Behavior Score Compared Against a Score of 4.0 for All Participants and Participants in Each Organization

Sample	Variable	N	Mean	StDev	SE Mean	95% CI	T	P
All participants	EB	342	3.75	0.60	0.03	(3.684, 3.813)	-7.690	0.000
ACC Warren	EB	37	3.72	0.64	0.11	(3.511, 3.935)	-2.650	0.012
ILSC	EB	74	3.89	0.63	0.07	(3.740, 4.030)	-1.570	0.120*
PEO CS&CSS	EB	39	3.83	0.43	0.07	(3.686, 3.968)	-2.490	0.017
PEO GCS	EB	76	3.65	0.62	0.07	(3.513, 3.796)	-4.860	0.000
SoSE&I	EB	8	3.84	0.57	0.20	(3.371, 4.317)	-0.780	0.460*
TACOM	EB	25	3.76	0.62	0.13	(3.503, 4.017)	-1.930	0.066*
TARDEC	EB	54	3.69	0.56	0.08	(3.536, 3.843)	-4.060	0.000
Other	EB	29	3.65	0.72	0.13	(3.375, 3.919)	-2.660	0.013

EB = Ethical Behavior; ACC Warren = Army Contracting Command-Warren, ILSC = Integrated Logistics Support Center, PEO CS&CSS = PEO Combat Support & Combat Service Support, PEO GCS = Program Executive Office Ground Combat Systems, SoSE&I = System of Systems Engineering and Integration Directorate, TARDEC = Tank Automotive Research, Development, and Engineering Center, TACOM = TACOM-LCMC Command Group and Staff, Other = Smaller Organizations Not Listed

Chapter 5 Discussion

Introduction

The Department of Defense makes improved ethical behavior and decision making an annual priority within its military, civilian, and contracted workforce. However, the mechanism by which the Department attempts to improve this behavior is often through attorney-developed mandatory training and policy memos. While these are commonly employed techniques, utilized independently they suffer from their own efficacy issues. Research indicates that leadership, particularly authentic leadership, can have a positive impact on improving the ethical behavior and decision making of employees. This study measured the current ethical climate of the Detroit Arsenal and the level of authentic leadership practiced to determine its impact on ethical behavior. Data for the study were collected via an online survey using SurveyMonkey. Analysis of the data was completed via regression-based inferential statistics

The chapter includes a summary of the quantitative results, implications for practice, recommendations for practitioners, recommendations for future research, and concludes with study limitations.

Summary of Results and Discussion

The purpose of this study is to measure the current ethical climate of the Detroit Arsenal to determine the level of authentic leadership practiced, and its impact on ethical behavior. There were 419 employees at the Detroit Arsenal, Warren Michigan who attempted the survey. There were 75 of the consenting participants who completed less than 75% of the survey, and two participants indicated they did not want to participate after reading the informed consent. These 77 participants were excluded from the final sample, yielding a final sample size for analysis of N = 342 students. The participants were approximately 70% male. The pay band

most represented was GS 12/13 and it comprised 55% of the sample. The level of education most denoted was a Masters degree comprising 43% of the sample. PEO GCS was the organization with the most respondents at 22% of the sample. Finally, 57% of the respondents had no military experience.

Participants completed a survey that included the validated 16-item Authentic Leadership Questionnaire (ALQ) (Walumbwa et al., 2008) to measure the level of authentic leadership present at the Detroit Arsenal. Respondents were asked to rate their leader on each question, which consisted of a 5-point Likert type scale that ranged from 1-5 (“Not at all” - “Frequently, if not always”). One was the lowest score available on each question with five being the highest.

Four ethics related vignettes were utilized to measure the level of ethical behavior displayed by employees at the Detroit Arsenal. There were five responses available to the participant for each vignette. Each response was assigned a pre-determined score of 1-5. One was the lowest score available on each question with five being the highest.

This research investigated two variables: authentic leadership and ethical behavior. Authentic leadership is the independent variable of the study, while ethical behavior is the dependent variable. Demographic variables were also obtained in the study to determine their role as moderators of the relationship between authentic leadership and ethical behavior.

Authentic leadership is defined in this study as “a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development” (Walumbwa et al., 2008, p. 94).

Ethical behavior is defined as “individual behavior that is subject to or judged according to generally accepted moral norms of behavior” (Trevino et al., 2006, p.952)

The psychometric properties of authentic leadership and ethical behavior were evaluated via Cronbach’s coefficient alpha test of internal consistency reliability (Cronbach, 1951) and via face validity prior to testing the hypotheses. Both variables demonstrated acceptable psychometric properties suggesting the study survey provided reliable and valid data.

Five research questions were addressed in this study:

- Q1. What is ethical climate at the Detroit Arsenal?
- Q2. Is there an authentic leadership style prevalent within the leadership team at the Arsenal?
- Q3. What is the relationship between ethical behavior and authentic leadership?
- Q4. Are there differences in the practice of authentic leadership and ethical behavior among the organizations within the TACOM community?
- Q5. Does gender, pay grade, education level, or military experience affect the impact of authentic leadership on ethical behavior?

The following three null hypotheses were tested to answer the study research questions:

H₀₁: Authentic leadership behavior is not a significant predictor of ethical behavior.

H₀₂: There are no significant differences in the impacts of authentic leadership on ethical behavior across organizations.

H₀₃: Gender, Pay Grade, education level, and military experience do not moderate the impact of authentic leadership on ethical behavior.

Research Question 1. Research Question 1 is, “What is ethical climate at the Detroit Arsenal?” There were five available responses on each of the presented ethical vignettes via

SurveyMonkey. The responses were scored from 1.0 (lowest) to 5.0 (highest). The questions were presented in random order with regards to the most appropriate response. The target score for evaluating the ethical behavior at the Detroit Arsenal was set at 4.0. This is the value that falls between the natural mean and a perfect score. The vignettes were designed to require a respondent to contemplate his response without easily picking the answer that would yield the “correct” score. The mean ethical score for the sample was 3.75 (CI=3.684, 3.813) on a 5.0 scale. This score does not meet the target score. **However, when compared against the results from the Sims & Keon (1999) sample (m=3.45) coupled with the fact that it is above the mean it does not suggest a significant deficiency in ethical behavior at the Detroit Arsenal. However, it does demonstrate that improvement can and should occur.**

Research Question 2. Research Question 2 is, “Is there an authentic leadership style prevalent within the leadership team at the Arsenal?” There were five available responses for each authentic leadership question via SurveyMonkey. The responses were scored from 1.0 (lowest) to 5.0 (highest). The questions ranged from “not at all” to “Frequently, if not always.” The target score for evaluating the level of authentic leadership at the Detroit Arsenal was 4.0. This is the value that falls between the natural mean and a perfect score. The mean authentic leadership score for the sample was 3.66 (CI=3.549, 3.767). This score is above average but it does not meet the target score and is lower than the score for ethical behavior. Wong & Lashinger (2012) conducted a study of authentic leadership and its role on performance and job satisfaction. The sample consisted of 600 nurses. The mean score of authentic leadership present in this survey was 2.35 (Note: This was based on a 0.0-4.0 scale and equates to 3.35 in this study). Rego et al (2012) studied the effect of authentic leadership on employees’ psychological capital and creativity. The sample consisted of 201 employees in a variety of

industries. The mean score of authentic leadership present in the survey was 2.90 (Note: This was based on a 0.0-4.0 scale and equates to 3.90 in this study). **These comparative results allow for a reasonable determination that the Detroit Arsenal possesses a respectable level of authentic leadership. However, improvement can and should occur with this variable amongst its leadership team.**

Research Question 3. Research Question 3 is, “What is the relationship between ethical behavior and authentic leadership?” The results showed a slightly positive, but not statistically significant relationship, between authentic leadership, the majority of its factors, and ethical behavior. This shows that as authentic leadership goes up so does ethical behavior. Interestingly, one of the four factors of authentic leadership, balanced processing, showed a negative relationship. This shows that as balanced processing goes up ethical behavior goes down.

Hypothesis H_{01} : Accepted H_{01} stated that authentic leadership behavior is not a significant predictor of ethical behavior. This hypothesis was accepted. The result of ethical behavior regressed on authentic leadership resulted in a p value of 0.721. This result far exceeded the threshold of $p < 0.05$. Authentic leadership behavior is not a significant predictor of ethical behavior for this sample of employees at the Detroit Arsenal.

Research Question 4. Research Question 4 is, “Are there differences in the practice of authentic leadership and ethical behavior among the organizations within the TACOM community?” There are differences in the practice of authentic leadership, and the display of ethical behavior among the organizations sampled. One-sample t-Tests were conducted for both variables across all organizations. With regards to authentic leadership, only ACC Warren, PEO GCS, and SoSE&I met the target score of 4.0 with statistical significance. With regards to

ethical behavior, only the ILSC, SoSE&I, and TACOM met the target score of 4.0 with statistical significance. It should be noted that SoSE&I only had 8 participants in this study.

Hypothesis 02: Accepted H₀₂ stated that there are no significant differences in the impacts of authentic leadership on ethical behavior across organizations. Ethical behavior was regressed against authentic leadership for each organization at the Detroit Arsenal. This hypothesis was accepted. Seven of the eight organizations showed no significance in the impact of ethical behavior on authentic leadership. It is worth noting that while not statistically significant, the ILSC, SoSE&I, and TARDEC showed a negative relationship between the variables. SoSE&I had only 8 participants take part in the survey. This shows that as authentic leadership increases ethical behavior declines. This may be due to different demographic characteristics of the organization, and their moderating effects on the relationship between authentic leadership and ethical behavior. One organization, PEO CS&CSS, did show a statistically significant positive relationship between authentic leadership and ethical behavior.

Research Question 5. Research Question 5 is, “Does gender, pay grade, education level, or military experience affect the impact of authentic leadership on ethical behavior?” Gender, pay grade, and military experience showed slightly negative, but not statistically significant, moderation effects on the relationship between authentic leadership and ethical behavior. This shows that as females increased, pay grade increased, and military experience increased, the impact of authentic leadership on ethical behavior declines. Education showed a slightly positive moderation effect, which shows that as education level increases the impact of authentic leadership on ethical behavior also increases.

Hypothesis 03: Accepted Hypothesis₀₃ stated that gender, pay grade, education level, and military experience do not moderate the impact of authentic leadership on ethical behavior. This

hypothesis was accepted. The result of ethical behavior regressed on authentic leadership along with gender, pay grade, education, and military experience showed p values of 0.222, 0.593, 0.634, and 0.194 respectively. These results indicate that none of these variables significantly moderated the impact of authentic leadership on ethical behavior.

Implications for Practice and Recommendations

Authentic leadership did not have a significant impact on ethical behavior at the Detroit Arsenal as measured in this study despite the trend showing an overall positive relationship. However, other studies have shown it to have significant impacts on employee's moral courage and ethical behavior, and ethical organizational cultures (Hannah et al., 2005). In particular, Hannah et al. (2011) found with a sample of soldiers at a U.S. Army Training School that authentic leadership can have a significant impact on follower's moral courage. This involves acting ethically or resisting pressure to act unethically in order to maintain principles. In this model, they showed that moral courage mediated the influence of authentic leadership on ethical behavior. Authentic leadership involves behaviors that should be taught, emphasized, and rewarded to facilitate ethical behavior among employees. The Harvard Business School now offers executive education in Authentic Leadership Development. The Detroit Arsenal could benefit from providing this type of training to its leadership team. The fact that the overall Detroit Arsenal sample fell short of the benchmark scores for both authentic leadership and ethical behavior demonstrates that both areas should be treated as high priority areas for improvement within the population.

Ethics training is an important tool for enhancing ethical behavior. However, the manner in which it is conducted could be improved. Beerel (2014) proposes that online ethics tools are not the best method for teaching ethics. She offers some suggestions that could benefit the

employees of the Detroit Arsenal. First, ethics education should be conducted in the workplace versus a classroom or auditorium. Second, the curriculum should include a look at the organization's own decision making. Third, lawyers should not be included in developing the curriculum as their focus is typically on the rules of law. There are fundamental differences between what is legal and what is ethical. Finally, an annual report of the organization's decisions should be written and ethics training should include a discussion of the lessons learned.

It is possible that the environment and culture at the Detroit Arsenal reduces the impact of authentic leadership on ethical behavior. The organization is made up of military members, civilians, and contractors. The rigid structure and organizationally emphasized ethical conduct of the United States Military surrounds employees daily as they complete their job requirements. This may moderate the impact of authentic leadership on ethical behavior. This implies that new employees should be given extra attention with regards to ethics training, and extra emphasis on authentic leadership behavior to increase the impact of the culture early in their careers.

The literature clearly demonstrates the importance of leadership in both directing and indirectly influencing the environment for moral courage and ethical behavior. Secretary of Defense Ashton Carter set the standard for all leaders to follow by directly communicating on the expectations for ethical behavior. Leaders at all levels of the Detroit Arsenal should be encouraged to emphasize ethical behavior in communication both formally and informally.

Recommendations for Future Research

Areas of future research on authentic leadership and its impact on ethical behavior include a similar study utilizing a different instrument to measure ethical behavior, measuring only civilian leadership, and looking at authentic leadership's impact on followers' moral courage. Based on the results of this study three areas for future research are suggested.

The first recommendation for future research is to conduct a similar study while changing the measurement instrument for the dependent variable. In place of utilizing scored vignettes to measure ethical behavior, an instrument such as the DIT could be utilized. It is possible that the lack of correlation between these two variables may have been caused by the measurement of ethical behavior.

The second recommendation for future research is to conduct a similar study while changing the sample to measure the independent variable. The authentic leadership measurement could be taken specifically from the civilian leadership at the Detroit Arsenal. This would give insight into the impact of authentic leadership on ethical behavior while controlling for the influence of military leadership.

The third recommendation for future research is to conduct a study on the impact of authentic leadership on follower's moral courage. Moral courage has shown to potentially moderate the relationship of authentic leadership on ethical behavior. Since moral courage is an important characteristic for employees to have within an organization this type of study may further illustrate the importance of authentic leadership on creating an ethical environment at the Detroit Arsenal.

Study Limitations

This study has three limitations associated with data collection and measurement. The limitations are the instrument used to measure ethical behavior, the instrument used to measure authentic leadership, and the population being homogenous.

First, the instrument utilized to measure ethical behavior may not have been varied enough to produce dichotomies between what the respondent felt was the correct response and what behavior they would select in real-world situation. Vignettes were utilized in an attempt to

remove social bias from the responses. However, it is possible that employees have seen enough of these instruments in formal training that they are accustomed to sorting through the desired answer.

Second, the study of authentic leadership is still a relatively recent subject of inquiry. This study uses the authentic leadership questionnaire (ALQ) developed by Walumbwa et al. to measure the level of authentic leadership present at the Detroit Arsenal. This measure has shown validity in operationally defining authentic leadership, and has proven to be neutral across cultures. However, it alone may not include all relevant or important constructs in defining authentic leadership. This could have had an effect on defining the importance of a particular leadership style on ethical behavior.

Finally, the population sampled was made up entirely of employees at the Detroit Arsenal. Many of these employees have the majority of their professional work experience in the defense industry. It is possible that the culture of this population limited the impacts of authentic leadership on ethical behavior.

References

- Avolio, Bruce J, Gardner, William L, Walumbwa, Fred O, Luthans, Fred, May, Douglas R., (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *Leadership Quarterly*, 15(6), 801-823.
- Beerel, A., (2014). Why ethics training doesn't work: We should be focusing on advancing learning, transformation and wisdom, not catching 'bad' people. (Ethics Education). *New Hampshire Business Review*, 36(2)
- Browning, J., & Zabriskie, N. B. (October 01, 1983). How Ethical Are Industrial Buyers?. *Industrial Marketing Management*, 12, 4, 219.
- Bush, G. W., (2000). Executive order 12674 of April 12, 1989 (as modified by E.O. 12731) : Principles Of Ethical Conduct For Government Officers And Employees. *Journal of Power and Ethics*, 1(1)
- Cameron, Kim S., Dutton, Jane E., Quinn, Robert E., (2003). Positive organizational scholarship foundations of a new discipline.
- Cianci, Anna M, Hannah, Sean T, Roberts, Ross P, Tsakumis, George T., (2014). The effects of authentic leadership on followers' ethical decision-making in the face of temptation: An experimental study. *Leadership Quarterly*, 25(3), 581.
- Cronbach, L. (1951, September). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334. doi:10.1007/BF02310555
- Deshpande, S. P. (January 01, 1997). Managers' perception of proper ethical conduct: The effect of sex, age, and level of education. *Journal of Business Ethics*, 16, 1, 79-85.

- Elm, Dawn R., Weber, James., (1994). Measuring moral judgment: The moral judgment interview or the defining issues test? *Journal of Business Ethics: JBE.*, 13(5), 341.
- Forsyth, D. R.,. (1980). A taxonomy of ethical ideologies. *Journal of Personality and Social Psychology*, 39(1), 175-184.
- Gardner, William L, Avolio, Bruce J, Luthans, Fred., (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *Leadership Quarterly*, 16(3), 343-372.
- Hannah, Sean T, Avolio, Bruce J, Walumbwa, Fred O., (2011). Relationships between authentic leadership, moral courage, and ethical and pro-social behaviors. *Business Ethics Quarterly*, 21(4), 555.
- Hannah, S. T., Lester, P.B., & Vgelgesang, G. (2005). Moral Leadership: Explicating the moral component of authentic leadership. In W. L. Gardner, B.J. Avolio, & F. O. Walumbwa (Eds.), *Authentic leadership and practice: Origins, effects, and development*: 43-82. Amsterdam: Elsevier.
- Hinkin, T. R., 1998. A brief tutorial on the development of measures for use in questionnaires. *Organizational Research Methods*, 1(1): 104-121.
- Irwin, T.,. (2007). The development of ethics a historical and critical study. volume 1, volume 1,
- Kendall, F.,. (2014). Ethics and acquisition professionalism: It is all about trust.(from the under secretary of defense for acquisition, technology, and logistics). *Defense AT & L*, 43(5)
- Michie, Susan, Gooty, Janaki., (2005). Values, emotions, and authenticity: Will the real leader please stand up? *Leadership Quarterly*, 16(3), 441-457.
- Radtke, R. R.,. (2000). The effects of gender and setting on accountants' ethically sensitive decisions. *Journal of Business Ethics*, 24(4), 299-312.

- Rego, A., Sousa, F., Marques, C., & e, C. M. P. (March 01, 2012). Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 65, 3, 429.
- Rest, J. R., (1979). Development in judging moral issues.
- Rest, J. R., (1999). Postconventional moral thinking a neo-kohlbergian approach.
- Rest, J. R. and S. Thoma: 1985, 'Relation of Moral Judgement Development to Formal Education', *Development Psychology* 21(4), 709–714.
- Santos, J. R. (1999, April). Cronbach's Alpha: A tool for assessing the reliability of scales. *Journal of Extension*, 37(2).
- Sims, Randi L, Keon, Thomas L., (1999). Determinants of ethical decision making: The relationship of the perceived organizational environment. *Journal of Business Ethics*, 19(4), 393-401.
- Stead, W Edward, Worrell, Dan L, Stead, Jean Garner., (1990). An integrative model for understanding and managing ethical behavior in business organizations. *Journal of Business Ethics*, 9(3), 233.
- Touche Ross & Co., (1988). *Ethics in American Business : An opinion survey of key business leaders on ethical standards and behavior*. New York: Touche Ross.
- Treviño, Linda K, Weaver, Gary R, Reynolds, Scott J., (2006). Behavioral ethics in organizations: A review. *Journal of Management*, 32(6), 951.
- Trevino, L. K., (1986). Ethical decision making in organizations: A person-situation interactionist model. *Academy of Management Review*, 11(3)

- Walumbwa, Fred O, Avolio, Bruce J, Gardner, William L, Wernsing, Tara S, Peterson, Suzanne J., (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1), 89.
- Weeks, William A, Moore, Carlos W, McKinney, Joseph A, Longenecker, Justin G., (1999). The effects of gender and career stage on ethical judgment. *Journal of Business Ethics*, 20(4), 301-313.
- White, R. D., (1999). Are women more ethical? recent findings on the effects of gender upon moral development. *Journal of Public Administration Research and Theory*, 9(3), 459-471.
- Wong, C. A., & Laschinger, H. K. S. (April 01, 2013). Authentic leadership, performance, and job satisfaction: the mediating role of empowerment. *Journal of Advanced Nursing*, 69, 4, 947-959.

Appendix A - IRB Approval



Institutional Review Board
Office of the Provost
research.ltu.edu irb@ltu.edu

November 27, 2015

Leland Shea
Lawrence Technological University
College of Management
Senior Service College Fellowship Program
lshea@ltu.edu

Dear Mr. Shea,

I am pleased to report that the IRB application to conduct research with human participants for your SSCF thesis "Improving Ethical Behavior through Authentic Leadership" has been approved under the Expedited review path for a period of one year, November 27, 2015 – November 27, 2016.

The IRB is satisfied that the following ethical concerns regarding the treatment of your human participants have been addressed in your research protocol: (1) The research involves administering a web-based survey to an individual who is at least 18 years of age or older in order to determine if there is an ethical climate at the Detroit Arsenal, if authentic leadership style is the prevalent leadership style, and if there is a relationship between authentic leadership and ethical climate; (2) Participants who will voluntarily consent to complete the survey are free to withdraw from the study at any time; (3) You have identified potential risks to you and the participants; and (4) You have assured that a balance exists between potential benefits of the research to the participants and/or society and the risk assumed by the participants.

Please contact the IRB if you require an extension to your project after one year. Please note you must contact the IRB if you make a change to your research protocol that impacts the ethical treatment of your research participants. Please do not hesitate to contact the IRB if you have any questions.

Sincerely,

Matthew Cole, Ph.D.
Chair, Institutional Review Board (IRB)
Lawrence Technological University
irb@ltu.edu o: 248.204.3096 f: 248.204.3099

The Lawrence Tech IRB is organized and operated according to guidelines of the United States Office for Human Research Protections and the United States Code of Federal Regulations and operates under Federal Wide Assurance No. FWA00010997 that expires 02/23/2021.

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Appendix B - ALQ Permission

Leland Shea



To whom it may concern,

This letter is to grant permission for Leland Shea to use the following copyright material for his/her research:

Instrument: ***Authentic Leadership Questionnaire (ALQ)***

Authors: ***Bruce J. Avolio, William L. Gardner, and Fred O. Walumbwa***

Copyright: ***2007 by Bruce J. Avolio, William L. Gardner, and Fred O. Walumbwa***

Three sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any published material.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Walumbwa".

Mind Garden, Inc.
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Appendix C - Informed Consent and Survey Instrument**Purpose**

The purpose of this research is to measure the current ethical climate of the Detroit Arsenal as well as the practice of authentic leadership by its directors, supervisors, and team leaders. This should determine the level of authentic leadership present and to determine its impact on ethical decision making.

Informed Consent

As an adult 18 years of age or older, I agree to participate in this research about the the effects of authentic leadership on ethical behavior. This survey is being conducted to support research efforts being performed by Leland K. Shea, Department of Management, Lawrence Technological University and a student of the Senior Service College Fellowship Program of the Defense Acquisition University: leland.shea@dau.mil

I understand that my participation is entirely voluntary; I can withdraw my consent at anytime. By agreeing to participate in this study, I indicate that I understand the following:

1. The purpose of the research is to determine the ethical climate at the Detroit Arsenal. Additionally, the research will determine if the presence of authentic leadership impacts the ethical climate in any way.

Should I choose to participate in the survey, I am aware that my feedback will be consolidated with my peers' and the outcome will be briefed to TACOM LCMC leadership allowing them to be better informed to make organizational changes.

2. If I choose to participate in this research, I will be asked to complete an online questionnaire. The questionnaire will include items relating to ethics and leadership within the organization. The questionnaire will take approximately 10 minutes to complete.

3. There is no incentive for participation.

4. All items in the questionnaire are important for analysis and my data input will be more meaningful if all questions are answered. However, I do not have to answer any that I prefer not to answer. I can discontinue my participation at anytime without penalty by exiting out of the survey.

5. This research will not expose me to any discomfort or stress beyond that which might normally occur during a typical day. There are no right or wrong answers; thus, I need not be stressed about finding a correct answer.

6. There are no known risks associated with my participating in this study.

7. Data collected will be handled in a confidential manner. The data collected will remain anonymous.

8. The purpose of this research has been explained and my participation is entirely voluntary.

9. I understand that the research entails no known risks and by completing this survey, I am agreeing to participate in this research.

YOU MAY PRINT THIS PAGE FOR YOUR RECORDS.

Research at Lawrence Technological University that involves human participants is carried out under the oversight of the Institutional Review Board. Questions or problems regarding these activities should be addressed to Dr. Matthew Cole, Chairperson of the Institutional Review Board, at irb@ltu.edu, Lawrence Technological University, 21000 West Ten Mile Road, Southfield, MI 48075, (248) 204-3096.

* 1. Have you read the informed consent and do you agree to participate?

- ☐ I have read this informed consent and I AGREE to participate
- ☐ I have read this informed consent and I DO NOT AGREE to participate

Demographic Data
<p>* 2. What is your current pay grade or equivalent level?</p> <p><input type="radio"/> GS 1-4</p> <p><input type="radio"/> GS 5-8</p> <p><input type="radio"/> GS 9-11</p> <p><input type="radio"/> GS 12-13</p> <p><input type="radio"/> GS 14-15</p> <p><input type="radio"/> SES</p> <p><input type="radio"/> I am Active Duty Military</p> <p><input type="radio"/> I am a Contractor</p> <p>Other (please specify)</p> <div></div>

Demographic Data #2
<p>3. Are you or have you ever served in the United States Armed Forces or United States Coast Guard?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>
<p>4. For which Detroit Arsenal Tenant Organization do you work?</p> <p><input type="radio"/> ACC Warren</p> <p><input type="radio"/> ILSC</p> <p><input type="radio"/> PEO CS&CSS</p> <p><input type="radio"/> PEO GCS</p> <p><input type="radio"/> SoSE&I</p> <p><input type="radio"/> TACOM G Staff</p> <p><input type="radio"/> TARDEC</p> <p><input type="radio"/> Other (please specify)</p> <div></div>
<p>5. Are you Male or Female?</p> <p><input type="radio"/> Male</p> <p><input type="radio"/> Female</p>
<p>6. What is the highest level of education you have completed?</p> <p><input type="radio"/> High School/GED</p> <p><input type="radio"/> Associates Degree</p> <p><input type="radio"/> Bachelors Degree</p> <p><input type="radio"/> Some graduate work</p> <p><input type="radio"/> Masters Degree</p> <p><input type="radio"/> Doctorate</p>

ALQ					
This section is intended to measure authentic leadership.					
7. My Leader...					
	Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
...says exactly what he or she means.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...admits mistakes when they are made.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...encourages everyone to speak their mind.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...tells you the hard truth.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...displays emotions exactly in line with feelings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...demonstrates beliefs that are consistent with actions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...makes decisions based on his or her core values.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...asks you to take positions that support your core values.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. My Leader...	Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
...makes difficult decisions based on high standards of ethical conduct.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...solicits views that challenge his or her deeply held positions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...analyzes relevant data before coming to a decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...listens carefully to different points of view before coming to conclusions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...seeks feedback to improve interactions with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...accurately describes how others view his or her capabilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...knows when it is time to reevaluate his or her position on important issues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...shows he or she understands how specific actions impact others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ethics #1

9. You are the leader of a group which has been assigned to complete an important project for top management. The deadline is quickly approaching and the group has yet to come up with one reasonable alternative. You discuss the problem with your spouse at a restaurant, and the server, overhearing the problem, comes up with a fantastic idea. The server does not know you or your company and will most likely never have contact with anyone in the company again. When the group meets the next day, you present the idea. The group and top management are thrilled, giving you full credit. Most likely you will also receive a small cash bonus, a common practice in your company.

- ☐ Give partial credit to the server.
- ☐ Quickly explain that the idea is not mine giving credit to the server.
- ☐ Say nothing and allow the group and top management to think whatever they want.
- ☐ Give full credit to the server and suggest the server be compensated.
- ☐ Openly accept credit for the idea.

Ethics #2

10. Your department is responsible for issuing a year end report. You have worked alone on the report for the past three years, and everyone in the company has always given you positive feedback; as a matter of fact, you have always enjoyed a sense of pride in the report. This year however, you have been instructed to allow a relatively new employee to take part in the report. Reluctantly you have agreed, since there seemed no way out of the situation. The report has been divided by your manager, each writer being given an independent section. Two days before the report is due, the other employee gives you the opportunity to read his/her section. You are horrified by what you have read, the errors in format, grammar, and content are numerous.

- ☐ Correct the errors myself.
- ☐ Politely explain the errors to the other employee.
- ☐ Report the errors to my manager.
- ☐ Work diligently with the other employee, until all errors were corrected.
- ☐ Say Nothing.

Ethics #3

11. In the course of your normal job duties, you have come across some organizational practices which are discriminatory towards select groups of employees. You are not a member of any of the groups being discriminated against, however. It appears that the practices have been going on for as long as the company has been in business. The information is not public, and under normal circumstances it will never be. There is no way that anyone will ever know that you have found out about these practices.

- ☐ Quietly question the practices, stopping when resistance was given.
- ☐ Say nothing.
- ☐ Casually mention to my supervisor that I was concerned about discriminatory practices.
- ☐ Openly question the practices within the company, and if necessary go public, insisting on changes.
- ☐ Openly question the practices, going as far as necessary within the company hoping to implement changes.

Ethics #4

12. This year has not been a very good one for your company. Sales are down significantly, which has led to the lay off of many excellent employees. In addition, the company is facing a major lawsuit, which has the potential of bankrupting the firm. A prospective client has indicated an interest in placing a very large order which would guarantee the reinstatement of all laid-off employees, and would keep them employed for quite some time. However, the client is wary about the stability of your company. To improve the client's perception of the company, the sales manager has removed the reference to the lawsuit in the copy of the annual report given to the potential client. One responsibility of your position is to ensure the accuracy of company documents. Since few people ever read the entire report, it is doubtful that anyone else would notice the missing information.

- ☐ Ask the sales manager to provide the client with complete information.
- ☐ Talk with the sales manager, letting it drop after that.
- ☐ Do nothing.
- ☐ Do whatever was necessary to make sure that the client received the complete report.
- ☐ Talk with the top executives of the company, asking that the client be provided with complete information.

Survey Complete

Thank you for participating in this research. Your efforts are greatly appreciated.

Appendix D - DoD Principles of Ethical Conduct**PRINCIPLES OF ETHICAL CONDUCT**

- | | |
|--|--|
| <p>1. Public Service is a public trust, requiring employees to place loyalty to the Constitution, the laws and ethical principles above private gain.</p> <p>2. Employees shall not hold financial interests that conflict with the conscientious performance of duty.</p> <p>3. Employees shall not engage in financial transactions using nonpublic Government information or allow the improper use of such information to further any private interest.</p> <p>4. An employee shall not, except as [provided for by regulation], solicit or accept any gift or other item of monetary value from any person or entity seeking official action from, doing business with, or conducting activities regulated by the employee's agency, or whose interests may be substantially affected by the performance or nonperformance of the employee's duties.</p> <p>5. Employees shall put forth honest effort in the performance of their duties.</p> <p>6. Employees shall not knowingly make unauthorized commitments or promises of any kind purporting to bind the Government.</p> <p>7. Employees shall not use public office for private gain.</p> | <p>8. Employees shall act impartially and not give preferential treatment to any private organization or individual.</p> <p>9. Employees shall protect and conserve Federal property and shall not use it for other than authorized activities.</p> <p>10. Employees shall not engage in outside employment or activities, including seeking or negotiating for employment, that conflict with official Government duties and responsibilities.</p> <p>11. Employees shall disclose waste, fraud, abuse, and corruption to appropriate authorities.</p> <p>12. Employees shall satisfy in good faith their obligations as citizens, including all just financial obligations, especially those--such as Federal, State, or local taxes--that are imposed by law.</p> <p>13. Employees shall adhere to all laws and regulations that provide equal opportunity for all Americans regardless of race, color, religion, sex, national origin, age, or handicap.</p> <p>14. Employees shall endeavor to avoid any actions creating the appearance that they are violating the law or ethical standards. Whether particular circumstances create an appearance that the law or these standards have been violated shall be determined from the perspective of a reasonable person with knowledge of the relevant facts.</p> |
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Appendix E - Executive Order 12674

Executive Order 12674

Executive Order 12674 of April 12, 1989
(as modified by E.O. 12731)

"PRINCIPLES OF ETHICAL CONDUCT FOR GOVERNMENT OFFICERS AND EMPLOYEES"

"By virtue of the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to establish fair and exacting standards of ethical conduct for all executive branch employees, it is hereby ordered as follows:

"Part I Principles of Ethical Conduct

"Section 101. Principles of Ethical Conduct. To ensure that every citizen can have complete confidence in the integrity of the Federal Government, each Federal employee shall respect and adhere to the fundamental principles of ethical service as implemented in regulations promulgated under sections 201 and 301 of this order:

"(a) Public service is a public trust. requiring employees to place loyalty to the Constitution, the laws, and ethical principles above private gain.

"(b) Employees shall not hold financial interests that conflict with the conscientious performance of duty.

"(c) Employees shall not engage in financial transactions using nonpublic Government information or allow the improper use of such information to futher any private interest.

"(d) An employee shall not, except pursuant to such reasonable exceptions as are provided by regulation, solicit or accept any gift or other item of monetary value from any person or entity seeking official action from. doing business with, or conducting activities regulated by the employee's agency, or whose interests may be substantially affected by the performance or nonperformance of the employee's duties.

"(e) Employees shall put forth honest effort in the performance of their duties.

"(f) Employees shall make no unauthorized commitments or promises of any kind purporting to bind the Government.

"(g) Employees shall not use public office for private gain.

Executive Order 12674

"(h) Employees shall act impartially and not give preferential treatment to any private organization or individual.

"(i) Employees shall protect and conserve Federal property and shall not use it for other than authorized activities.

"(j) Employees shall not engage in outside employment or activities, including seeking or negotiating for employment, that conflict with official Government duties and responsibilities.

"(k) Employees shall disclose waste, fraud, abuse, and corruption to appropriate authorities.

"(l) Employees shall satisfy in good faith their obligations as citizens, including all just financial obligations, especially those such as Federal, State, or local taxes—that are imposed by law.

"(m) Employees shall adhere to all laws and regulations that provide equal opportunity for all Americans regardless of race, color, religion, sex, national origin, age, or handicap.

"(n) Employees shall endeavor to avoid any actions creating the appearance that they are violating the law or the ethical standards promulgated pursuant to this order.

"Sec. 102. Limitations on Outside Earned Income.

"(a) No employee who is appointed by the President to a full-time noncareer position in the executive branch (including full-time noncareer employees in the White House Office, the Office of Policy Development, and the Office of Cabinet Affairs), shall receive any earned income for any outside employment or activity performed during that Presidential appointment.

"(b) The prohibition set forth in subsection (a) shall not apply to any full-time noncareer employees employed pursuant to 3 U.S.C. 105 and 3 U.S.C. 107(a) at salaries below the minimum rate of basic pay then paid for GS-9 of the General Schedule. Any outside employment must comply with relevant agency standards of conduct, including any requirements for approval of outside employment.

"Part II Office of Government Ethics Authority

"Sec. 201. The Office of Government Ethics. The Office of Government Ethics shall be responsible for administering this order by:

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"(a) Promulgating, in consultation with the Attorney General and the Office of Personnel Management, regulations that establish a single, comprehensive, and clear set of executive-branch standards of conduct that shall be objective, reasonable, and enforceable.

"(b) Developing, disseminating, and periodically updating an ethics manual for employees of the executive branch describing the applicable statutes, rules, decisions, and policies.

"(c) Promulgating, with the concurrence of the Attorney General, regulations interpreting the provisions of the post-employment statute, section 207 of title 18, United States Code; the general conflict-of-interest statute, section 208 of title 18, United States Code; and the statute prohibiting supplementation of salaries, section 209 of title 18, United States Code.

"(d) Promulgating, in consultation with the Attorney General and the Office of Personnel Management, regulations establishing a system of non-public (confidential) financial disclosure by executive branch employees to complement the system of public disclosure under the Ethics in Government Act of 1978. Such regulations shall include criteria to guide agencies in determining which employees shall submit these reports.

"(e) Ensuring that any implementing regulations issued by agencies under this order are consistent with and promulgated in accordance with this order.

"Sec. 202. Executive Office of the President. In that the agencies within the Executive Office of the President (EOP) currently exercise functions that are not distinct and separate from each other within the meaning and for the purposes of section 207(e) of title 18, United States Code, those agencies shall be treated as one agency under section 207(c) of title 18, United States Code.

"Part III Agency Responsibilities

"Sec. 301. Agency Responsibilities. Each agency head is directed to:

"(a) Supplement, as necessary and appropriate the comprehensive executive branch-wide regulations of the Office of Government Ethics, with regulations of special applicability to the particular functions and activities of that agency. Any supplementary agency regulations shall be prepared as addenda to the branch-wide regulations and promulgated jointly with the Office of Government

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Ethics, at the agency's expense, for inclusion in Title 5 of the Code of Federal Regulations.

"(b) Ensure the review by all employees of this order and regulations promulgated pursuant to the order.

"(c) Coordinate with the Office of Government Ethics in developing annual agency ethics training plans. Such training shall include mandatory annual briefings on ethics and standards of conduct for all employees appointed by the President, all employees in the Executive Office of the President, all officials required to file public or nonpublic financial disclosure reports, all employees who are contracting officers and procurement officials, and any other employees designated by the agency head.

"(d) Where practicable, consult formally or informally with the Office of Government Ethics prior to granting any exemption under section 208 of title 18, United States Code, and provide the Director of the Office of Government Ethics a copy of any exemption granted.

"(e) Ensure that the rank, responsibilities, authority, staffing, and resources of the Designated Agency Ethics Official are sufficient to ensure the effectiveness of the agency ethics program. Support should include the provision of a separate budget line item for ethics activities, where practicable.

"Part IV Delegations of Authority

"Sec. 401. Delegations to Agency Heads. Except in the case of the head of an agency, the authority of the President under sections 203(d), 205(e), and 208(b) of title 18, United States Code, to grant exemptions or approvals to individuals is delegated to the head of the agency in which an individual requiring an exemption or approval is employed or to which the individual (or the committee, commission board, or similar group employing the individual) is attached for purposes of administration.

"Sec. 402. Delegations to the Counsel to the President.

"(a) Except as provided in section 401, the authority of the President under sections 205(d), 205(e), and 208(b) of title 18, United States Code, to grant exemptions or approvals for Presidential appointees to committees, commissions, boards, or similar groups established by the President is delegated to the Counsel to the President.

"(b) The authority of the President under sections 208(d), 205(e), and 208(b) of title 18, United States Code, to grant exemptions or approvals

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for individuals appointed pursuant to 3 U.S.C. 105 and 3 U.S.C. 107(a), is delegated to the Counsel to the President.

"Sec. 403. Delegation Regarding Civil Service. The Office of Personnel Management and the Office of Government Ethics, as appropriate, are delegated the authority vested in the President by 5 U.S.C. 7301 to establish general regulations for the implementation of this Executive order.

Part V General Provisions

"Sec. 501. Revocations. The following Executive orders are hereby revoked:

"(a) Executive Order No. 11222 of May 8, 1965.

"(b) Executive Order No. 12565 of September 25, 1986.

"Sec. 502. Savings Provision.

"(a) All actions already taken by the President or by his delegates concerning matters affected by this order and in force when this order is issued, including any regulations issued under Executive Order 11222, Executive Order 12565, or statutory authority, shall, except as they are irreconcilable with the provisions of this order or terminate by operation of law or by Presidential action, remain in effect until properly amended, modified, or revoked pursuant to the authority conferred by this order or any regulations promulgated under this order. Notwithstanding anything in section 102 of this order, employees may carry out preexisting contractual obligations entered into before April 12, 1989.

"(b) Financial reports filed in confidence (pursuant to the authority of Executive Order No. 11222, 5 C.F.R. part 735, and individual agency regulations) shall continue to be held in confidence.

"Sec 503. Definitions. For purposes of this order, the term:

"(a) Contracting officers and procurement officials' means all such officers and officials as defined in the Office of Federal Procurement Policy Act Amendments of 1988.

"(b) Employee' means any officer or employee of an agency, including a special Government employee.

"(c) 'Agency' means any executive agency as defined in 5 U.S.C.

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105, including any executive department as defined in 5 U.S.C. 101, Government corporation as defined in 5 U.S.C. 103, or an independent establishment in the executive branch as defined in 5 U.S.C. 104 (other than the General Accounting Office), and the United States Postal Service and Postal Rate Commission.

"(d) 'Head of an agency' means, in the case of an agency headed by more than one person, the chair or comparable member of such agency.

"(e) 'Special Government employee' means a special Government employee as defined in 18 U.S.C. 202(a).

"Sec. 504. Judicial Review. This order is intended only to improve the internal management of the executive branch and is not intended to create any right or benefit, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers, or any person."

GEORGE BUSH

THE WHITE HOUSE,
October 17, 1990.

Appendix F - Department of Defense Directive 5500.07**Department of Defense
DIRECTIVE****NUMBER 5500.07
November 29, 2007**

GC, DoD

SUBJECT: Standards of Conduct

- References:**
- (a) DoD Directive 5500.7, subject as above, August 30, 1993 (hereby canceled)
 - (b) DoD 5500.7-R, "Joint Ethics Regulation," current version
 - (c) Title 5, Code of Federal Regulations, parts 733, 2634-2638, 2640-2641, and 3601 and Chapter XVI, Subchapter B
 - (d) Executive Order 12674, "Principles of Ethical Conduct for Government Officers and Employees," April 12, 1989, as amended
 - (e) through (m), see Enclosure 1

1. REISSUANCE AND PURPOSE**This Directive:**

- 1.1. Reissues Reference (a) to update policy and responsibilities for the DoD ethics program.
- 1.2. Continues to authorize Reference (b) and part 3601 of Reference (c).
- 1.3. Implements Chapter XVI, Subchapter B, and part 733 of Reference (c); Reference (d); Public Law 95-521 (Reference (e)); sections 3326 and 3374 of title 5, United States Code (U.S.C.) (Reference (f)); sections 801-940 (commonly known and hereafter referred to as the "Uniform Code of Military Justice (UCMJ)") and section 1060 of title 10, U.S.C. (Reference (g)); sections 202, 203, 205, 207-209, and 219 of title 18, U.S.C. (Reference (h)); section 1353 of title 31, U.S.C. (Reference (i)); section 908 of title 37, U.S.C. (Reference (j)); section 423 of title 41, U.S.C. (Reference (k)); part 3.104-6 of the Federal Acquisition Regulation (Reference (l)); and chapter 304 of title 41, Code of Federal Regulations (Reference (m)).

2. APPLICABILITY AND SCOPE

- 2.1. This Directive applies to the Office of the Secretary of Defense, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the

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DoD Field Activities, and all other organizational entities within the Department of Defense (hereafter referred to collectively as the "DoD Components").

2.2. The applicability and scope of Reference (b) are set forth below.

2.2.1. Section 2 of Chapter 7 of Reference (b), "Public Financial Disclosure Report (SF-278)," applies to certain former DoD personnel in accordance with Reference (e).

2.2.2. Chapter 9 of Reference (b), "Post-Government Service Employment," applies to former DoD personnel in accordance with References (h) and (k).

2.2.3. Reference (b) applies in whole to individuals nominated or assigned (detailed or appointed) to DoD positions in accordance with section 3374 of Reference (f) or similar other authorities.

2.2.4. Although sections 208 and 209 of Reference (h) do not apply to "Title 32 National Guard Members" (as defined in subsection 1-233 of Reference (b)), or enlisted members of the Military Departments, the following provisions do apply to them.

2.2.4.1. Except as approved by the "DoD Agency" "Designated Agency Ethics Official (DAEO) or Designee" (as these terms are defined in subsections 1-201, 1-206, and 1-208 of Reference (b)), Title 32 National Guard Members and enlisted members of the Military Departments, including enlisted special Government employees (SGEs) (as that term is defined in subsection 1-232 of Reference (b)) shall not participate personally and substantially as part of their official DoD duties in any particular matter in which, to their knowledge, they, their spouses, minor children, partners, entities in which they are serving as officers, directors, trustees, partners, or employees, or any entities with which they are negotiating or have an arrangement concerning prospective employment, have a financial interest.

2.2.4.2. Except as approved by the DoD Agency DAEO, Title 32 National Guard Members and enlisted members of the Military Departments, except enlisted SGEs, shall not receive any salary or contribution to or supplementation of their Federal Government salary as compensation for their service to the Federal Government from any entity other than the Federal Government or the treasury of any State, county, or municipality.

2.2.5. Although Chapter XVI, Subchapter B, and part 733 of Reference (c) and Reference (m) do not apply to Title 32 National Guard Members or enlisted members of the Military Departments, the following regulations are determined to be appropriate for them and are hereby made applicable to them as if the terms "employee" and "SGE," as used therein, include them.

2.2.5.1. Parts 2634-2635, 2638, and 2640 of Reference (c).

2.2.5.2. Chapter 304 of Reference (m).

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2.2.6. Penalties for violation of the standards of conduct prescribed in Reference (b) include statutory and regulatory sanctions, including judicial (criminal and civil) and administrative actions, for DoD civilian employees and members of the Military Departments.

2.2.6.1. The provisions printed in bold italics in Reference (b) constitute lawful general orders or regulations within the meaning of Article 92 (section 892 of Reference (g)) of the UCMJ, are punitive, and apply without further implementation. In addition to prosecution by court-martial under the UCMJ, a violation may serve as a basis for adverse administrative action and other adverse action authorized by U.S.C. or Federal regulations. In addition, violation of any provision in Reference (b) may constitute the UCMJ offense of dereliction of duty or other applicable punitive articles.

2.2.6.2. Violation of any provision in Reference (b) by DoD civilian employees may result in appropriate criminal prosecution, civil judicial action, disciplinary or adverse administrative action, or other administrative action authorized by U.S.C. or Federal regulations.

3. DEFINITIONS

Terms used in this Directive are defined in Reference (b).

4. POLICY

It is DoD policy that:

4.1. DoD Agencies shall administer and maintain a comprehensive Agency ethics program, ensure compliance with References (b) through (m), and ensure that all organizations within their jurisdiction administer and maintain a comprehensive ethics program.

4.2. No DoD Agency shall issue directives, regulations, or other similar documents that implement, supplement, restrict, or modify this Directive or Reference (b) without approval of the General Counsel of the Department of Defense (GC, DoD).

4.3. DoD personnel shall perform their official duties lawfully and comply with the highest ethical standards.

4.4. Unless specifically prohibited, DoD personnel may delegate in writing any authority delegated or assigned to them in this Directive or in References (b) or (c).

4.5. A violation of this Directive or of References (b) or (c) does not create any right or benefit, substantive or procedural, enforceable at law by any person against the United States, its agencies, its officers or employees, or any other person.

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4.6. Enlisted members of the Armed Forces, including Title 32 National Guard Members, shall be considered SGEs to the same extent that military officers are considered SGEs in accordance with section 202 of Reference (h).

5. RESPONSIBILITIES

5.1. The GC, DoD, shall:

5.1.1. Ensure that appropriate updates, modifications, additions, and deletions are made to Reference (b) and section 3601 of Reference (c).

5.1.2. Serve as the approval authority for DoD Agency documents issued pursuant to paragraph 4.2.

5.2. The Heads of the DoD Agencies shall:

5.2.1. Ensure that the Agency ethics program is maintained and that References (b) and (c) are followed within their Agencies.

5.2.2. Appoint the Agency DAEO and Alternate DAEO.

5.2.3. Ensure that the DoD Agency DAEO resolves any inconsistencies among applicable regulations in matters of ethics and standards of conduct.

5.2.4. Ensure that sufficient resources are provided for the DAEO to execute an effective Agency ethics program.

5.2.5. Ensure that the Agency (including all DoD Component commands or organizations, as this term is defined in subsection 1-219 of Reference (b)) does not issue directives, regulations, or other similar documents that implement, supplement, restrict, or modify this Directive or References (b) or (c) without the approval of the GC, DoD.

5.3. The Heads of DoD Component Commands or Organizations shall ensure that:

5.3.1. Position and billet descriptions of DoD Component command or organization personnel indicate whether financial disclosure report filing is required as a condition of employment, and if so, which report is required.

5.3.2. Ethics training is conducted as required within the DoD Component command or organization.

5.3.3. DoD Component command or organization personnel file required financial disclosure reports in a timely manner.

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5.4. The General Counsel of each DoD Agency shall serve as the DoD Agency DAEO unless the Head of the Agency appoints another person.

6. EFFECTIVE DATE

This Directive is effective immediately.



Robert M. Gates

Enclosure

E1. References, continued

DoDD 5500.07, November 29, 2007

E1. ENCLOSURE 1

REFERENCES, continued

- (e) Public Law 95-521, "Ethics in Government Act of 1978," October 26, 1978, as amended
- (f) Sections 3326 and 3374 of title 5, United States Code
- (g) Sections 801-940 and 1060 of title 10, United States Code
- (h) Sections 202, 203, 205, 207-209, and 219 of title 18, United States Code
- (i) Section 1353 of title 31, United States Code
- (j) Section 908 of title 37, United States Code
- (k) Section 423 of title 41, United States Code
- (l) Federal Acquisition Regulation, subsection 3.104-6, "Disqualification," of part 3, "Improper Business Practices and Personal Conflicts of Interest," current edition
- (m) Title 41, Code of Federal Regulations, Chapter 304

Appendix G - Secretary of Defense Ethics Engagement Memo

SECRETARY OF DEFENSE
1000 DEFENSE PENTAGON
WASHINGTON, DC 20301-1000

FEB 12 2016

MEMORANDUM FOR: SEE DISTRIBUTION

SUBJECT: Leader-Led, Values-Based Ethics Engagement

Integrity and public confidence in Department of Defense activities and in its people are indispensable to mission success. As such, I have continued to make ethics and values-based decision-making a priority. This involves more than rules-based compliance, although such compliance is imperative. Implementing values-based decision-making from the top down will foster a culture of ethics and promote accountability, respect and transparency throughout the Department.

To this end, I expect leaders at every level of the Department to engage personally with their subordinates in both formal and informal discussions about values-based decision-making. Our personnel, at all levels, should carefully consider the Department's primary ethical values set forth in Chapter 12 of the Joint Ethics Regulation, DoD 5500.07-R, and applicable organizational values, when making decisions as part of their official duties. These values include, among others, honesty, integrity, loyalty, accountability for actions and decisions, fairness and impartiality, respect, and responsible citizenship. Importantly, this engagement must begin with top leaders and cascade down to each subordinate organization's leader. Leaders at all levels must foster a culture of ethics within their organizations by setting the example in their own conduct and by making values-based decision-making central to all aspects of the Department's activities. I understand that many of you already have programs in place to ensure this is happening within your organizations. As leaders, you are in the best position to determine the optimal means for implementing this engagement effort within your respective organizations and to instill the importance of ethics and values-based decision-making within your subordinate leaders. This should be viewed as a continuing engagement rather than a one-time effort.

I have the greatest confidence in you as leaders of the Department. I believe that our dedication to ethics and values-based decision making will continue to inspire public confidence in the Department of Defense and its people.

cc:
Deputy Secretary of Defense



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